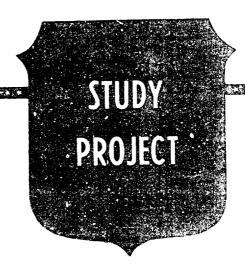
FIR PIE COPY

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the appropriate military service or government agency.



THE ARMY'S PROGRAM EXECUTIVE OFFICER (PEO) CONCEPT: WHO IS IN CHARGE?

BY

LIEUTENANT COLONEL DELOS W. ANDERSON

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

24 FEBRUARY 1989





HLS. ARLIN MAR COLLEGE, CARLISLE BARMACHS, PA 17013-5050

Best Available Copy

REPORT DOCUMENTATION PAGE	READ INSTRUCTIONS BEFORE COMPLETING FORM	
1. REPORT NUMBER 2. GOVT	ACCESSION NO. 3 RECIPIENT'S CATALOG NUMBER	
The Army's Program Executive Officer (TYPE OF REPORT & PERIOD COVERED	
Concept: Who Is In Charge?	PEO) Individual Study Froject	
	6. PERFORMING ORG. REPORT NUMBER	
7. AUTHOR(a)	8. CONTRACT OR GRANT NUMBER(s)	
LTC Delos W. Anderson		
9. PERFORMING ORGANIZATION NAME AND ADDRESS	10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS	
U.S. Army War College	ANEX & WORK UNIT NOMBERS	
Carlisle Barracks, PA 17013	<u> </u>	
11. CONTROLLING OFFICE NAME AND ADDRESS	12. REPORT DATE	
Same	24 February 1989	
	13 NUMBER OF PAGE:	
14 MONITORING AGENCY NAME & ADDRESS/II dillerent from Ca	ntrolling Office) 5. SECURITY CLASS, (at this report)	
	Unclassified	
	15. SECLASSIFICATION DOWNGRADING	
	SC4 EDULE	
16 DISTRIBUTION STATEMENT (of this Report)		
Approved for public release; distribute	tion is unlimited.	
17. DISTRIBUTION STATEMENT (of the obstract entered in Block	20, Il dillerent from Report)	
19 SUPPLEMENTARY HOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue as reverse side if necessary and identify by block number)		
In May 1987, the Army implemented a new materiel acquisition management system.		
It is one of partnership of responsibility between the Program Executive Officer (PEO)/Program Manager (PM) and the supporting organizations of the		
U.S. Army Materiel Command (AMC). However, the PEO/PM element reports to the		
Army Acquisition Executive (AAE) within the office of the Secretary of the Army		
and the AMC reports to the Army Chief of Staff. The PEO and PM accomplish		
	(continued)	

SECURITY CLASSIFICATION OF THIS PAGE(When Date Entered)

ABSTRACT (continued)

their mission through the use of functional personnel supplied by AMC units. This parallel chain of command causes the acquisition system to be based, in large part on personalities and attitutes of mutual cooperation by those involved instead of organization process. This study will review the legislative and administrative developments that led to the formation of the PEO concept. It will then examine the resulting PEO management system structure and responsibilities, and assess its effectiveness at the point where daily program execution occurs -- PEO, PM and Functional Support Manager (FM) levels. Finally, it will draw conclusions which identify major areas needing improvement and recommends a course of action that should improve the Army's acquisition management.

Unclassified

Approved for public release distribution unlimited.

ABSTRACT

AUTHOR: Delos W. Anderson, LTC, SC

TITLE: The Army's Program Executive Officer (PEO) Concept:

Who is in Charge?

FORMAT: Individual Study Project

DATE: 24 February 1989 PAGES: 27 CLASSIFICATION: Unclassified

In May 1987, the Army implemented a rew material acquisition management system. It is one of partnership of responsibility between the Program Executive Officer (PEO)/Program Manager (PM) and the supporting organizations of the U.S. Army Materiel Command (AMC). However, the PEO/PM element reports to the Army Acquisition Executive (AAE) within the office of the Secretary of the Army and the AMC reports to the Army Chief of Staff. The PEO and PM accomplish their mission through the use of functional personnel supplied by AMC This parallel chain of command causes the acquisition system to be based, in large part on personalities and attitudes of mutual cooperation by those involved instead of organization process. study will review the legislative and administrative developments that led to the formation of the PEO concept. It will ther examine the resulting PEO management system structure and responsibilities, and assess its effectiveness at the point where daily program execution occurs -- PEO, PM and Functional Support Manager (FM) levels. Finally, it will draw conclusions which identify major areas needing improvement and recommends a course of action that should improve the Army's acquisition management.

The views expressed in this paper are those of the author and do not necessarily reflect the views of the Department of Defense or any of its agencies. This document may not be released for open publication until it has been cleared by the open p

TABLE OF CONTENTS

	1	Page
ABSTRACT		ii
CHAPTER I.	INTRODUCTION	
	Background	
	Summary	5
II.	THE ARMY REORGANIZATION AND PEO CONCEPT	
	Army Reorganization	6
	PEO Concept	
	Roles and Functions	
	Results	11
III.	ASSESSMENT	13
	Scope	13
	PEO/PM Perspective	
	AMC Perspective	16
IV.	CONCLUSIONS AND RECOMMENDATIONS	19
BIBLIOGRAPHY.		21
APPENDIX 1		23



Acces	sion For	
NTIS	GF . &I	12
DTIC :	r <i>?</i>	
Unar .	anced	
Ju .tification		
. By		
Distribution/		
Availability Codes		
Avail and/or		
Dist	Special	•
A-1		

THE ARMY'S PROGRAM EXECUTIVE OFFICER (PEO) CONCEPT: WHO IS IN CHARGE?

CHAPTER I

INTRODUCTION

Contrary to the belief of some, there is neither a simple nor a single solution to improving our defense acquisition process. But we in the Defense Department do have a vision of how we can achieve excellence in defense acquisition.1

Frank C. Carlucci Secretary of Defense 28 January 1988

The Department of Army (DA) implemented the PEC management system on 1 May 1987 in response to requirements established by the Goldwater-Nichols Reorganization Act of 1986, and the recommendations of the Packard Commission which the President approved and then ordered by National Security Decision Directive (NSDD) 219. The legislative and executive guidance required implementation of a responsive, effective and efficient acquisition system. After nearly two years of experience it is now appropriate to review and assess the resulting process, which dramatically changed the Army's method of doing material acquisition, to determine if the directed objectives have been achieved at the point where daily program management occurs.

This paper discusses the origin of the PEO management concept, the Army's actions in developing and implementing the system, and

presents an assessment of the resulting acquisition process from the perspectives of the Program Executive Officer, Program Manager, and Functional Support Manager. It concludes with recommended changes that would improve the existing PEO management system.

BACKGROUND

There have been more changes in the laws and regulations affecting the industry in the last seven years than there were in the previous 25.2

David Packard

In response to years of Department of Defense (DOD) program costs and schedule overruns, inadequate weapon system performances, over-priced spare parts, testing deficiencies, record budget deficits, and congressional pressure, President Reagan formed a blue ribbon commission in 1985, chaired by David Packard, to seek out methods that would improve the management and organization of the Defense Department. The commission's charter was to conduct a comprehensive study of the legislative oversight responsibilities, budgeting process, and organizational structure and arrangements within DOD - the Office of the Secretary of Defense, Joint Chiefs of Staff, Unified and Specified Commands, and the Military Departments. A primary objective was to thoroughly review DOD's procurement management system.

In June 1986 this committee, which became known as the Packard Commission, made a number of recommendations to improve DOD's organizational arrangements and acquisition management procedures. Many of these recommendations, which centered around increasing efficiencies, reducing costs and decreasing acquisition time, were

implemented within DOD by NSDD 219 and enacted into Public Law by the Goldwater-Nichols Department of Defense Reorganization Act of 1986. Some of the most significant recommendations involved streamlining the acquisition process through reorganization of the acquisition structure within DOD and creating what is now called the Program Executive Officer (PEO) acquisition management system.

The Packard Commission specifically recommended changing acquisition organizations and procedures through:

contraction by statue of the new position of Under Secretary of Defense (Acquisition) and authorization of an additional Level II appointment in the Office of the Secretary of Defense. This Under Secretary, who would have a solid industrial background, would be a full-time Defense Acquisition Executive. He would set overall policy for procurement and research and development (R&D), supervise the performance of the entire acquisition system, and establish policy for administrative oversight and auditing of defense contractors.3

Further, it was mandated that each Service establish a similiar position, Service Acquisition Executive (SAE), to be filled by a presidential appointee responsible for acquisition within their Service.

They would appoint Program Executive Officers (PEOs), each of whom would be be responsible for a reasonable and defined number of acquisition programs. Program Managers for these programs would be responsible directly to their respective PEO and report 'only' to him on program matters.4

The Packard Commission recommendations were incorporated within NSDD 219, published 1 April 1986. With the issuance of this

directive and passage later of the Goldwater-Nichols Act, DOD had firm guidance and strict milestones in implementing a new acquisition management system.

On 8 July 1986, the Deputy Secretary of Defense directed by DOD Directive 4245.1 that Military Departments establish Service Acquisition Executives (SAE), Program Executive Officers (PEO), and Program Managers (PM), in accordance with NSDD 219, "Implementation of the Recommendations of the President's Commission on Defense Management", (April 1, 1986). The following is a summarization of the Defense Department's policy guidelines for acquisition management and the responsibilities of management officials.5

- Acquisition of defense systems will be accomplished efficiently and effectively.
- Organizational structures and procedural arrangements will be streamlined to the greatest extent possible.
- Acquisition executives will be given appropriate resources to execute their program management responsibilities and held accountable.
- The DAE is the principal advisor to the Secetary of Defense for the acquisition of defense systems and equipment, and will ensure that acquisition policies and practices are complied with throughout DOD.
- Military Department SAE's will administer their acquisition programs within established policy guidelines and work with the DAE to resolve issues and conflicts in acquisition programs.
- The PEO will manage a defined number of acquisition programs and be directly responsible to the SAE on all program matters.
- PMs are responsible to their respective PEOs for managing a specific acquisition program, reporting directly to the PEO for all program matters with no more than one supervision layer between the PM and the SAE. The reporting chain can be shorter if deemed appropriate by the Secretaries of the Military Departments.

SUMMARY

The Packard Commission and resulting NSDD 219, and the Goldwater-Nichols Act of 1986 have significantly changed the management philosophy for DOD's acquisition business. The management of military programs now centers on putting teams of highly qualified people in charge of programs with the authority and responsibility to do the job. The philosophy also calls for decentralized execution and reduction of bureaucratic layering. The objective of this management method is to increase the effectiveness of the entire acquisition process by allowing those responsible for day-to-day program management - PEO and PM - to focus and make timely programmatic decisions (cost, schedule, performance) and seek guidance from the SAE by exception.

ENDNOTES

- 1. Frank C. Carlucci, "A Quest for Excellence: DOD's Approach to Defense Acquisition", <u>Defense Issues</u>, Vol. 3 Number 3., p.2.
- 2. "A Hard Look at How DOD Does Business," <u>Defense 88</u>, Special Issue, undated, p.7.
- 3. President's Blue Ribbon Commission on Defense Management, \underline{A} Quest for Excellence, June 1986, p.13.
 - 4. <u>Ibid</u>.
- 5. U.S. Department of the Defense, <u>DOD Directive 4245.1</u>, pp.1-3.

CHAPTER II

THE ARMY REORGANIZATION AND PEO CONCEPT

To comply with the requirements of Title V of the Goldwater-Nichols Act, NSDD 219, and DOD Directive 4245.1, the Secretary of the Army formed a Reorganization Commission to develop details for consolidating the Secretariat and Army Staff organizations into an integrated staff, and a concept for implementing the PEO acquisition management system. Most of the commission's recommendations were approved by the Secretary of the Army.

ARMY REORGANIZATION

The organizational realignment adopted by the Secretary of the Army required moving from the Army staff to the Secretariat level the acquisition, auditing, information management, inspector general, legislative affairs, comptroller, and research and development (excluding military requirements and user test and evaluation) functional activities.1

The two areas most affecting acquisition management were the Office of the Deputy Chief of Staff for Research, Development and Acquisition (ODCSRDA), and the Directorate of Contracting from the Office of the Deputy Chief of Staff for Logistics (ODCSLOG). Major personnel savings were achieved by consolidating these functions with the Office of the Assistant Secretary for Research, Development and Acquisition ASA(RDA); however, responsibilities

increased. ASA(RDA) is now responsible for schedules, types of contracts, cost and technical tradeoffs, contractor performance, and analysis of test results. The Army's reorganization resulted with ASA(RDA) being organized as depicted in Figure 1.2

PEO CONCEPT

In response to NSDD 219 and DOD guidance on the acquisition executive system of management, the Secretary of the Army published a concept of operations, with established milestones, for implementing the Army's PEO management system on 30 January 1987. The following is a summary of the Secretary's memorandum.3

- The Under Secretary of the Army is designated as the Army Acquisition Executive (AAE) with responsibilities for the policy and programmatic aspects of Army acquisitions. Development and execution of programs will be decentralized, but under the overall policy guidance of the AAE.
- Scope of PEO/AAE system depends on the number and type of programs placed under the PEO/AAE management. Concept structure to be developed within 30 days.
- Major (ASARC) and designated acquisition programs (DAP) will make up the initial PEO groupings and should be operating under the PEO concept by 30 September 87.
- PEOs appointed over non-major programs will have In-Process Review (IPR) decision authority.
- AAE will appoint other PEOs to provide management oversight for other/non-major acquisition programs to include dual-hatting within the material develop-development command structure where it makes sense to do so.
- Structure for laboratory and materiel item management will remain basically as it is now. The PEO/PM will will procure services from these agencies as needed.
- The materiel development commands will be responsible for functional support to the PEOs and PMs, beyond that that provided by the PEO/PM core staff. The commands will have no supervisory authority over AAE managed PEOs or PMs.

- Functions performed by Department of the Army Systems Coordinator (DASC) will be performed by the PEO office.
- The PEO system will eliminate HQs AMC from the programmatic supervision and reporting chain for PEO/AAE designated programs.
- An implementation plan is to be developed by 20 March 1987 and acquisition regulations are to be updated within six months.

With the implementation of the PEO/AAE concept on 1 May 1987, the Army streamlined its management to increase efficiency and reduce overhead.4 It reduced the number of organizations and eliminated certain redundancies by shortening the acquisition decision-making system from five layers (Secretariat/Army Staff, Headquarters Army Materiel Command (AMC), Headquarters Major Subordinate Command within AMC, System PM, and PM; to three layers - AAE, PEO, and PM. The top-to-bottom organization depicted in Figure 2 resulted.5

To enforce this acquisition streamlining, the Secretary of the Army delegated acquisition responsibilities to the AAE who reports to the DAE, operates downward through the PEO who supervises a reasonable number (5-7) PMs that report only to the PEO. This operating concept is depicted in Figure 3.6 The PEOs and PMS receive "matrix functional support" from organizations throughout AMC who have no supervisory authority over AAE managed PEOs and PMs. This management philosophy is shown at Figure 4.7

ROLES AND FUNCTIONS

With the Army's new integrated staff and implementation of the PEO management philosophy, several roles and functions were either

added, changed or deleted in the acquisition business. The Army now had an AAE, PEOs and PMs with important program management duties, a new ASA(RDA) organization with increased acquisition responsibilities, and procurement mission changes for AMC. The roles and functions of these key players in the new acquisition management process are discussed below.

The AAE is the service acquisition executive within DA and responsible for:

- establishing overall guidance for the policy and programmatic aspects of all acquisitions.
- ensuring that programmatic decision authority rests only in the AAE/PEO/PM chain for PEO administered programs.
- designating programs to be administered by a PEO and approves the requirement for a program to be project/product managed.
- -Serves as the senior performance rater for the PEOs.8

The ASA(RDA) is designated the Deputy Army Acquisition Executive and provides support to the AAE to include:

- establishment and approval of RDA policies and standards.
- reviews of baseline evaluation and program performance.
- program management oversight.
- management of RDA funding.9

The PEO administers a defined number of AAE assigned major and/or non-major programs and is responsible for:

- making programmatic decisions (cost, schedule, performance).
- developing charters and rating assigned PMs.
- ensuring responsive support for PMs.

- maintaining mission area interface with supporting materiel developer and user.
- providing resourcing data to the Long Range Research, Development, and Acquisition Plan (LRRDAP).
- defending assigned programs.
- coordinating with Secretariat and Army Staff.
- monitoring PM and contractor performance to include significant contract management issues.10

The Program/Product Manager (PM) is assigned responsibility and delegated authority by the PEO for centralized management of a specified acquisition or readiness program. The PM is responsible for:

- program execution.
- formulating baseline.
- reporting only to PEO for program matters.
- identifying personnel and functional management support shortfalls affecting achievement of program baseline to the PEO.11

AMC is responsible for the research, development, test and evaluation (RDTE) and the acquisition and logistics support of assigned material in response to approved requirements. AMC is also now responsible for:

- providing direct functional support and assistance to PEOs and PMs.
- ensuring the competence and availability of functional personnel for all aspects of the materiel system life cycle.
- identifying system improvements to streaml: the acquisition process.
- providing RDA, program, budget, and weapon system advice and recommendations to the AAE/PEO/PM.12

RESULTS

The Army complied with DOD's guidance and Congressional legislation by removing layered procurement decisions and unaccountable acquisition officials from the Army structure, and programmatic decision authority from AMC. However, these streamlining efforts developed a process that is complex, interactive, and not autonomous in terms of resouces at the level of program execution.

PEOs and PMs now perform a variety of functions previously the responsibility of the Department of Army Staff, and interact and are highly dependent upon Headquarters AMC and its MSCs for functional support. Under the organizational arrangement, the PEO enforces program baselines for schedule, cost and performance and ensures responsive support for assigned PMs. The PMs basically continue their traditional role, but now have a higher level of accountability for program success or failure and a different relationship with AMC MSCs. The acquisition system now provides for the PM to be the prog. mmatic decisionmaker who cannot be overruled by a supporting functional organization or anyone else within the AMC chain-of-command. PMs respond to programmatic direction from and report to a PEO. The question is, to what extent have these acquisition reforms increased the effectiveness and efficiency of the acquisition management system at the point where day-to-day program execution takes place - the PEO, PM and Functional Support Managar (FM) level?

ENDNOTES

- 1. Martin Blumenson, "Reorganization: Army Shifts Gears," Army Magazine, Vol. 37, May 1987, p.48.
 - 2. Chart used in Figure 1 originated in OASA(RDA).
- 3. John O. Marsh, Secretary of the Army, letter to Chief of Staff, Army, Subject: Implementation of the Program Executive Officer (PEO) Concept (30 January 1987), pp.4-5.
- 4. James R. Ambrose, Department of the Army Office of the Under Secretary, Memorandum, Subject: Implementation of Program Executive Officer (PEO) Concept, 27 May 1987.
 - 5. Chart depicted in Figure 2 originated in OASA(RDA).
 - 6. Chart depicted in Figure 3 was obtained from within AMC.
 - 7. Ibid.
 - 8. U.S. Department of the Army, Army Regulation 70-1, p.6.
 - 9. Ibid., p.7.
 - 10. Ibid.
 - 11. Ibid.
 - 12. <u>Ibid.</u>, p.9.

CHAPTER III ASSESSMENT

SCOPE

This assessment of the PEO management and is focused at the point of program execution — the PEO and PM levels, as well as AMC organizations which provide functional support to PEOs and PMs. The findings presented are based, in large part from interviews conducted by the author with several current PEOs, PMs and managers at AMC activities which have been involved with the PEO management system since its inception in May 1987. In order to ensure candid responses to interview questions, non-attribution was afforded all interviewees.

PEO/PM PERSPECTIVE

PEOs and PMs have realized tangible benefits from the streamlined acquisition chain of authority. The PEO brings structure and
concentrated management to the mission area by forcing system
integration. By looking horizontally across a family of systems, the
PEO has increased the opportunities for enhancing effectiveness in
program performance, cost, and schedule through equipment
commonality, interoperability, and standardization. Further, the
PEO has the freedom to take programmatic risks and the authority to
challenge the material development (MATDEV) community. Most
importantly, the PEO has brought balance to the acquisition process.

In addition to these acquisition management enhancements, the PEO/PM organizations are now staffed with quality people, although few in number. The serving PMs are school trained, focus vertically on programs, and now concentrate less on engineering problems and more on management issues.

On the negative side, the acquisition management structure in place today is plaqued by many systemic problems which are causing a tension-filled and stressful working environment. The PEOs/PMs are experiencing great difficulty in achieving timely resolution on briefings, documentation, Planning, Programming and Budgeting System (PPBS) matters, and programmatic and functional issues up and throughout the organizational chains. The areas of responsibility for functional organizations require redefinition to emphasize policy, procedure and oversight functions and to eliminate involvement in programmatic issues. Further, the bureaucracy in-place will not respond adequately because of the many professional critics and advocates who have a not-invented-here mind-set and and create non-productive work for PMs.1 PEO/PM offices lack stability in staffing and funding. They are understaffed, overworked, and underfunded for items such as travel, contractor support, and office furniture.2 Further, the PEO does not have enough fiscal (budget) control to achieve optimum balance among programs.

The question of who is really in charge frequently arises due to lack of clear delineation of roles between the PEO/PM and functional support. The system is laden with mistrust, more

politics and bureaucracy and unnecessary oversight by HQDA, AMC and MSCs -- the checkers have not decreased. The administrative requirements of the previous acquisition process have been brought to the new system, which has increased administrative layering and reduced efficiency even with the increase in quality personnel at PEO/PM offices. More importantly, the programmatic workload has increased significantly (without comparable increases in resources) with the PEOs/PMs now performing functions previously the responsibility of HQDA.

As expected, individual and organizational personalities have impacted on the overall effectiveness of the PEO system. This centers around the previous system being institutionalized - a tradition - and as mentioned earlier, the question of who is really in charge. Most of the personnel, who have been a part of the Army's acquisition business for extended periods, are resisting the change to the new method of doing business and continue to do business as usual. Who is in charge is pointing to issues related to control and matrix management for functional support.

Under the matrix management structure established, the PEOs/PMs have the dilemma of having all program responsibility and very little authority. It becomes a constant challenge for the PEO/PM to ensure that not only the support required continues in order to maintain cost, schedule, and performance goals, but that the functional managers providing support are in agreement as to what is important and needs prioritization. The PEO/PM not only rely on acquired and learned skills as a leader and manager, but also persuade, convince,

cajole, beg, and even groval a little bit. This is the systemic dilemma of working in a matrix organization. Further, although the PEO organization is responsible directly to the AAE, this appears strongly caveated by the fact that many, if not most of the very crucial decisions involving the materiel development process still reside in the commodity commands of AMC -- contracting, funding, Materiel Fielding Packages, integrated logistics support, and fielding of equipment.

The PEO/PM perspective can best be concluded by two comments made when a PEO and PM were asked to summarize the existing situation. The PM stated, "I think the situation we have today has been properly dubbed a 'balance of tensions'."3 The PEO commented, "What we have here is an opportunity to change behavior; and we are making progress."4

AMC PERSPECTIVE

The AMC Functional Managers (FMs) interviewed believe that the high-level management involvement with development and implementation of the PEO management system has resulted with noticeable improvements in the acquisition environment. The "integrator" role of the PEO is a very important and positive step. Under the previous acquisition system, this function was reversly lacking and resulted with "vertical-slice" program acquisition and frequently mission area problems were not identified until they impacted system performance and cost. The PEO/PM offices have brought to the acquisition community an increase in the number of school trained and certified material managers and other personnel resources to deal with

acquisition problems. An immediate benefit realized by FMs is the ability to now focus their limited engineering resources more on research and development functions and less on program management duties.

The FMs are convinced the PEO management system philosophy is here to stay. Its success is receiving first priority from commodity commands. However, solutions to several issues are needed to increase effectiveness of the PEO/PM and FM. As the reader will discover, most of these challenges are consistent with many of the PEO/PM concerns.

The administrative burden of the previous acquisition system has been carried over and added layering to the PEO system with accompanying inefficiencies. A clear definition of roles and responsibilities between the PEOs/PMs and FMs is required. The "who is in charge" question. The degree of control and responsibility is important to FMs. Areas that were previously in the FMs domain are either totally the responsibility of the PEO/PM chain or, more importantly, fractured with the PEO/PM and FM partially accountable. To compound this situation, FMs perceive themselves as the "other side" which is causing the acquisition community to be without the cohesive qualities necessary for success. In addition, PEO/PM priorities are frequently in conflict with commodity command priorities causing both organizations difficulty in optimizing performance goals. This is further exasperated by the PEO/PM depending on matrix management support from the functional organization for most program support.

In summary, the FMs are certain the PEO/PM concept is working adequately, if your perspective is from the top of the acquisition chain looking downward. "However, at the point where program execution occurs (FM and PEO/PM) things are not okay."5 It is believed that several major management issues must be resolved, either bilaterally or at the highest management levels in order for the PEO management system to achieve optimization.

ENDNOTES

- 1. "A Hard Look at How DOD Does Business," Defense 88, Special Issue, undated, p.29.
 - 2. Ibid., p.30.
 - 3. Obtained from Non-Attribution Interview with a PM.
 - 4. Obtained from Non-Attribution Interview with a PEO.
 - 5. Obtained from Non-Attribution Interview with a FM.

CHAPTER IV

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The Packard Commission recommendations that caused the development and implementation of the three-level acquisition management system within the Army is basically sound. However, the streamlining efforts instituted to date are not enough -- inefficiencies remain that are affecting program management optimization goals.

As discussed in Chapter III, at the point where program success or failure begins - the PEO/FM and FM positions - have a host of common issues and concerns such as inadequate definition of roles and responsibilities, insufficient personnel resources forcing dependency on matrix management techniques, and increased administrative layering. Further, the higher organizations "supporting" the day-to-day program management efforts are, in effect, adding layers back to the system with their excessive over-sight and metaling. In July 1988, David Packard provided the following response to the question, "What would you do to slim down the defense acquisition organization?":

"Obviously, I think you have too many viewers in the system, so we start from there. The tradition has been built up, and people at the top want to know what's going on. ...it seems to me that you could depend a little bit more on guys you put out there to do the job and not double-check them so much. That's really what one of the big problems is."1

The system remains complex. Today the objectives of the Army reorganization and, in particular activities of the PEO management system are not yet being totally met at the PEO/PM and FM let its. The new acquisition system needs revision before it becomes a tradition.

RECOMMENDATIONS

While the new acquisition structure is still evolving, the Army's Senior Leadership must take action to resolve issues which are affecting the achievement of a truly streamlined acquisition system.

Solutions to the numerous issues discussed in this paper, most of which are in common with and shared between PEO/PM offices and FM activities, will set the tone for improving the total acquisition environment. First among these solutions is to clearly and emphatically answer the qustion, "Who is in charge?". A comment by the Secretary of Defense in July 1988 provides the best answer, "The key is...to put the authority in the program manager,...the acquisition 'czars' ought to be down at the program manager level."2 Once determined, other concerns can be quickly resolved, thereby improving the odds for achieving the efficiencies and effectiveness required of the PEO management system.

ENDNOTES

- 1. "A Hard Look at How DOD Does Business," Defense 88, Special Issue, undated, p.13.
 - 2. Ibid, p.6.

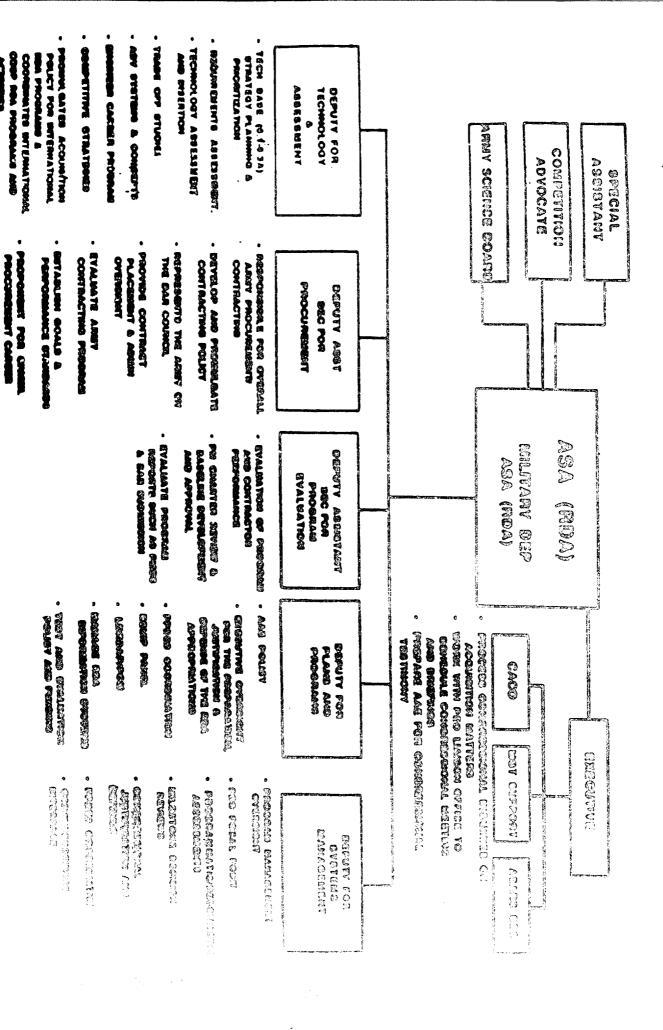
BIBLIOGRAPHY

- 1. "A Hard Look at How DOD Does Business." Defense 88, Special Issue Acquisition Leadership '88, undated, pp. 6-31.
- 2. Ambrose, James R. <u>Memorandum: Implementation of the Program Executive Officer (PEO) Concept</u>. 29 April 1987.
- 3. Ambrose, James R. Memorandum: Implementation of Program Executive Officer (PEO) Concept. 27 May 1987.
- 4. Blumenson, Martin. "Reorganization: Army Shifts Gears." Army Magazine, Vol. 37, May 1987, pp. 44-48.
- 5. Carlucci, Frank C. "A Quest for Excellence: DOD's Approach to Defense Acquisition." Defense Issues, Vol. 3 No. 3, pp. 1-2.
- 6. "Interview With GEN Louis C. Wagner, Jr., Commanding General, U.S. Army Materiel Command." Army Research, Development and Acquisition Bulletin, March-April 1988, pp. 8-10.
- 7. "Interview With Dr. J.R. Sculley, Assistant Secretary of the Army for RD&A and Deputy Army Acquisition Executive." Army Research Development and Acquisition Bulletin, September-October 1988, pp. 8-10.
- 8. Marsh, John O. Jr., Secretary of the Army. Memorandum: Implementation of the Program Executive Officer (PEO) Concept. 30 January 1987.
- 9. "PEO System Undergoes Overhaul." Army, Vol. 39 No. 1, p. 60.
- 10. President's Blue Ribbon Commission on Defense Management. A Quest for Excellence. Washington: June 1986.
- 11. Prina, L. Edgar. "The Goldwater-Nichols Act: Pitfalls and Promises," Sea Power, Vol. 15, January 1987, pp. 19-23.
- 12. "Progress on Streamlining the Acquisition System." Defense Issues, Vol. 2 No. 14, pp. 1-3.
- 13. "Reorganizing the Army Acquisition Structure." Army Research, Development and Acquisition Bulletin, September-October 1987, pp. 1-4.

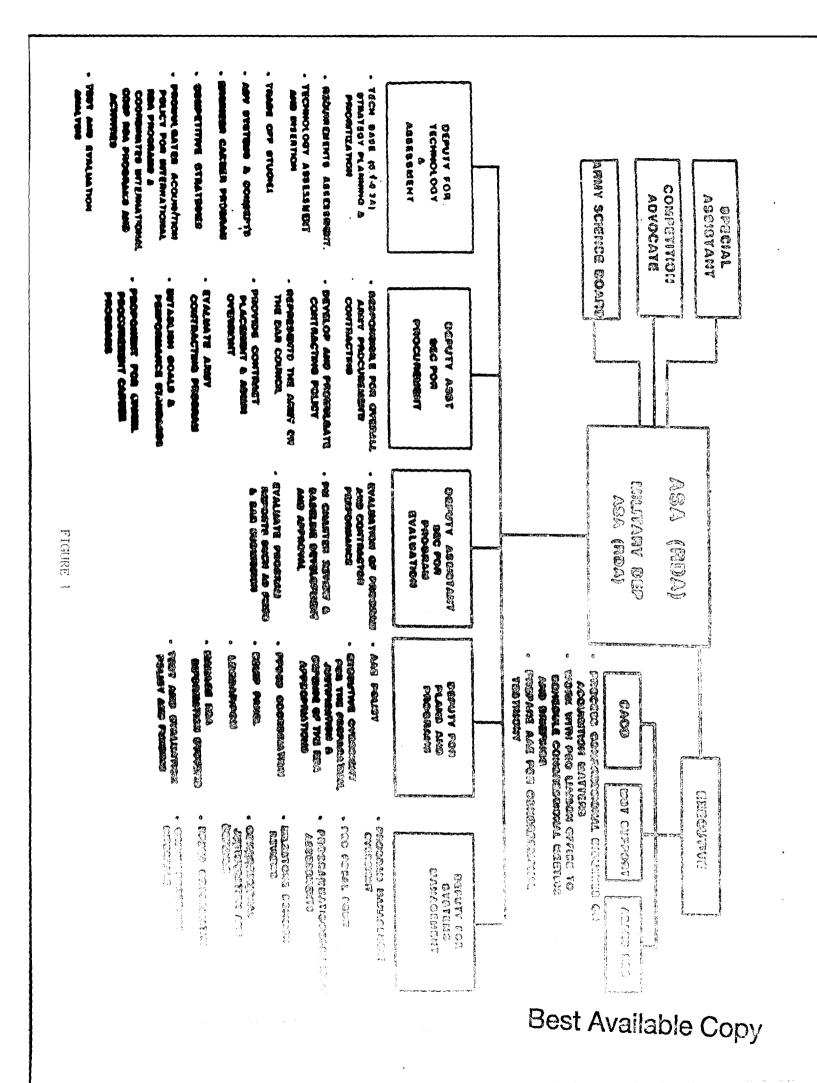
- 14. U.S. Department of the Army. Army Regulation 70-1: Systems Acquisitions Policy and Procedures. Washington: 10 October 1988.
- 15. U.S. Department of the Defense. <u>Department of Defense</u>
 <u>Directive 4245.1</u>: <u>Military Department Acquisition Management</u>
 <u>Officials Washington:</u> 8 July 1986.
- 16. U.S. Department of the Defense. <u>Department of Defense</u>
 <u>Directive 5000.43</u>: Acquisition Streamlining. Washington:
 15 January 1986.
- 17. U.S. Department of the Defense. <u>Department of Defense</u>
 <u>Directive 5134.1</u>: Under Secretary Defense (Acquisition). Washington:
 10 February 1987.

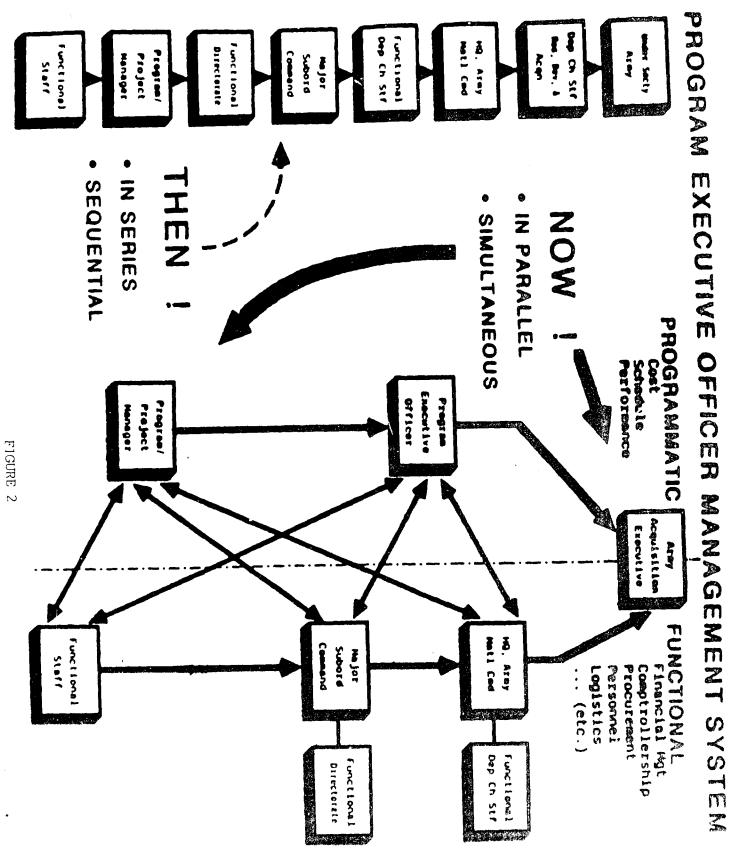
APPENDIX 1

(FIGURES 1 THROUGH 4)



PROT AND SYNCHATION APPARTMENT





Cost Available Copy

Copy available to DEIC does not parall fully leadle topicduction

OPERATING CONCEPT FOR THE ACQUISITION SYSTEM

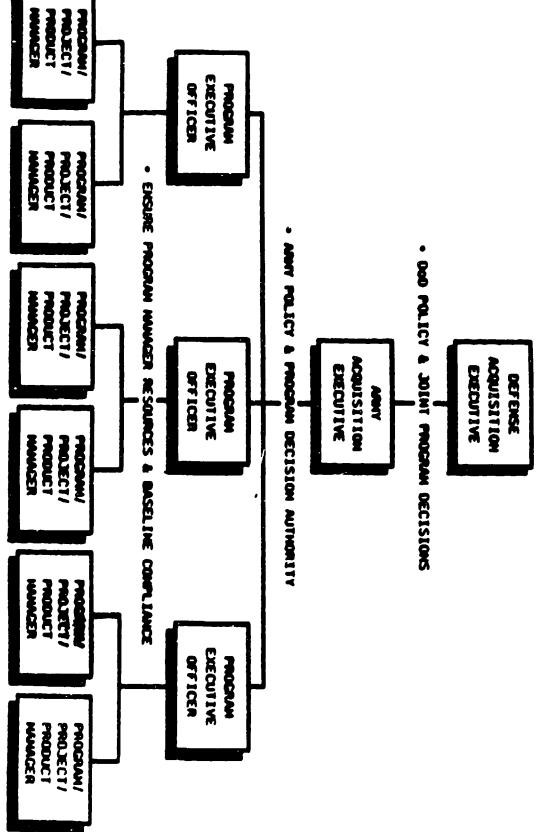


FIGURE 3

· EXECUTE PROGRESSIVITIES IN CONFLIMICE WITH PURCTIONAL STANDARDS & AME DECISIONS

Copy available to DTIC does not permit fully legible reproduction

PEO Management Philosophy LINES OF RESPONSIBILITY

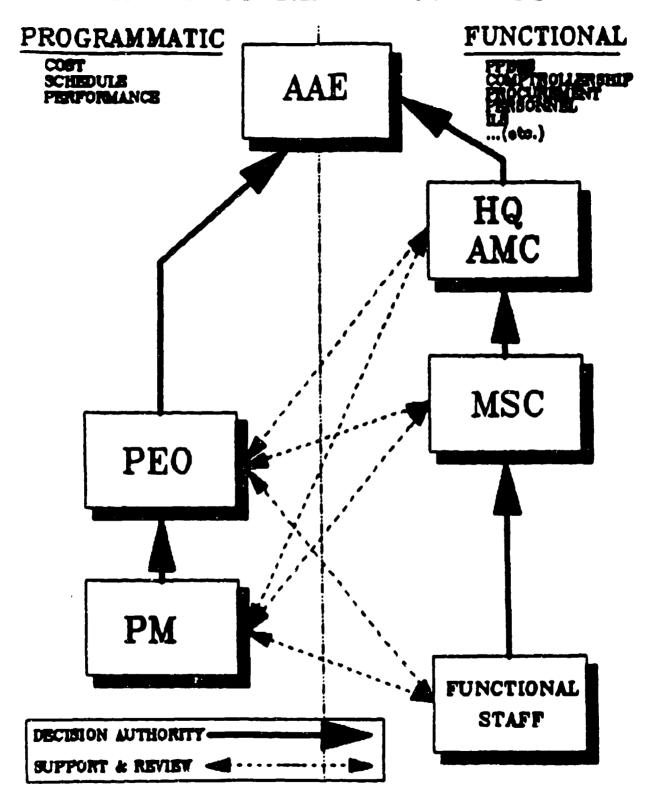


FIGURE 4

Copy available to DTIC does not permit fully legible reproduction

SECURITY CLASSIFICATION OF THIS PAGE, When Data Entered)

This paper focuses on the Follow-on-to-Lance (FOTL) which will modernize the soon to be obsolete Lance system. It identifies why NATO needs the new system, why the Soviets want to prevent its deployment, and how the political environment in Western Europe and the United States will impact the decision for or against development. The paper also discusses the Soviet frame of reference for reacting to U.S./NATO initiatives--Ideology, Insecurity and the Correlation of Forces. It describes past Soviet reactions to nuclear weapons modernization (Pershing Il's, Ground Launched Cruise Missiles, and Enhanced Radiation Weapons), and then postulates how the Soviets may respond politically and militarily to a FOTL deployment.

UNCLASSIFIED

USAWC Military Studies Program Paper

SOVIET REACTIONS TO FOLLOW-ON-TO-LANCE (FOTL)

An Individual Project

by

Lieutenant Colonel Richard O. Wightman Jr.

Colonel John W. De Pauw Project Advisor

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited

U.S. Army War College Carlisle Barracks, Pennsylvannia 17013 26 March 1989

The views expressed in this paper are solely those of the author and do not reflect the official policy or position of the Department of the Army, the Department of Defense, or the United States Government.

UNCLASSIFIED

ABSTRACT

AUTHOR: Richard O. Wightman Jr., Lieutenant Colonel

TITLE: Soviet Reactions to Follow-on-to-Lance (FOTL)

FORMAT: Individual Study

DATE: 26 March 1989 PAGES: 51 CLASSIFICATION: Unclassified

One of the most controversial areas of US military planning for the 1990's is Battlefield Nuclear Weapons (BNW) modernization. The current dilemma has been created in part by Soviet "public relations" activities in the area of troop reduction and arms control at a time when NATO must decide whether to modernize nuclear weapon systems currently deployed in Western Europe.

This paper focuses on the Follow-on-to-Lance (FOTL), which will modernize the soon-to-be-obsolete Lance system. It identifies why NATO needs the new system, why the Soviets want to prevent its deployment, and how the political environment in Western Europe and the US will impact the decision for or against development. The paper also discusses the Soviet frame of reference for reacting to US/NATO initiatives—ideology, insecurity, and the correlation of forces. It describes past Soviet reactions to nuclear weapons modernizations (Pershing IIs, Ground Launched Cruise Missiles, and Enhanced Radiation Weapons), and then postulates how the Soviets may respond politically and militarily to a FOTL deployment.

TABLE OF CONTENTS

ABSTRACT	r								•	•			•	•		Page 11
CHAPTER	I	INTRO	DUCT	ION	•	•		•	•	•	•	•	•		•	1
Chapter	II	FOLLO														
		The Sovie														
		NATO'														
		U.S.														9
CHAPTER	III	PAST	SOVI	ET A	CTI	ON	S A	ND	RI	SA(T]	4 01	ıs			14
		The D	ual	Trac	k D	ec:	isi	on	01	E 1	197	79				14
		The N	eutr	on E	omb	D	eba	cl	e	•	• .	•	•	•	•	18
CHAPTER	IV	THE I	NFLU	ENCE	OF	S	OVI	ВT	PI	ZRO	CEI	T	10:	18	•	23
CHAPTER	v	SOVIE	T RE	SPON	ISES	. ጥ	O F	'ስጥነ	t. • 1	. 1	.).TE	יים:	ידי	าพ	30
	•	Polit				-			_	-					-	
		Milit														
		Concl														34
BIBLIOGE	RAPHY															36



Accesio	For		
NTIS	•	A)	
Unamic Justific		0	
By	tion /		
A	vuilab iity	Codes	
Dist	Avuil a Spec		
A-1			

CHAPTER I

INTRODUCTION

On December 7, 1988, General Secretary Gorbachev announced that within two years the Soviet armed forces will be reduced by 500,000 men, 10,000 tanks, 8500 artillery systems and 800 combat aircraft; by 1991, six tank divisions will be withdrawn from East Germany, Czechoslovakia and Hungary, and disbanded, thus reducing Soviet forces there by 50,000 men and 5,000 tanks.{1}

Despite this announcement, the United States continues to develop a dual capable (for nuclear and conventional ammunition) weapon system called Follow-on-to-Lance (FOTL) that the Soviets(2) believe will have the capability to target out to the INF treaty limits of 500 km. (FOTL is scheduled to replace the current Lance system that becomes obsolete in the mid 1990s.)

The purpose of this paper is to answer the questions related to the classic systems dilemma: 1) What is the Soviet perception of the continued US development and deployment of a system such as FOTL? 2) Based on this perception how will they react politically and/or militarily?

This paper will show that 1) the Soviets believe no weapon system is ever definitively decisive, and that the modernization of a we pon system is but one more step in the inter-connected process of development; 2) because FOTL impacts the "correlation of forces" by providing support capability that frees up other US assets, its continued development will evoke military and political reaction by the Soviets.

Chapter II will provide a rationale for the deployment of FOTL and a description of the system's capabilities. It will also discuss current Soviet interpretations of FOTL capabilities, NATO's predicament and reaction to the possibility of a FOTL, and Congressional debate over FOTL. Chapter III will discuss past Soviet reactions to US nuclear weapons deployments. Chapter IV will focus on the framework for Soviet perceptions: ideology, insecurity and the theory of correlation of forces. Chapter V will discuss Soviet political and military responses to FOTL.

ENDNOTES

- 1. Frank C. Carlucci, "Report of the Secretary of Defense to the Congress on the FY 1990/FY 1991 Biennial Budget and FY 1990-1994 Defense Programs." (Washington D.C.: U.S. Government Printing Office, January 17, 1989), pp. 19-20. Also see Michael Dobbs, "Soviet Leader Meets with Reagan, Bush," The Washington Post, December 8, 1988, p. A-1.
- 2. Throughout this paper the term "Soviets" will generally refer collectively to a select group of decision-makers. These decision-makers include the Politburo, the Central Committee Secretaries (now the heads of the six commissions), members of the Defense Council, the Minister of Defense, the Soviet High Command (the CinCs of the Western, Southwestern, Southern and Far Eastern Theaters of Strategic Military Action (TSMA), Chief of the General Staff, the Foreign Minister and the Chief of the KGB.

CHAPTER II

FOLLOW-ON-TO-LANCE

The most significant current and future threat to US forces is that posed by Soviet/Warsaw Pact military forces. (1)

Through the 1990's this threat will consist of highly mobile, armored forces structured for offensive action (which require echelonment) (2) and supported by massive artillery, tactical aviation and electronic warfare forces, all operating under a sophisticated air defense umbrella. (3)

To counter this threat, AirLand Battle (ALB) doctrine stresses that the Corps commander must focus his efforts on the deep battle, the successful conduct of which is essential to prevent the second echelon from becoming a first echelon problem. (This paper will not address the validity of the requirement for deep attack.(4))

The System

The objectives of deep operations are to reduce the tempo of the enemy attack, to alter the enemy's commitment plan, and to create an opportunity to seize the initiative. (5) To accomplish this goal, the Corps commander must have a responsible and reliable weapon system capable of engaging second echelon targets, including both the attack of forces to disrupt or neutralize them, and the attack of command, control and communications (C3) nodes to interfere with the enemy commander's ability to bring combat power to bear at the time and place of

his choosing. (6) The present Lance system is not capable of fulfilling this requirement, nor was it ever designed too. The Follow-on-to-Lance (FOTL) will provide the Corps commander with this capability.

FOTL is needed to meet the doctrinal requirements for Corps and cross-Corps operational fires as outlined in Field Circular 100-15-1, Corps Deep Operations. (7) Tactical aircraft (TACAIR) are the primary means for conventional attack of deep targets today; however, tactical air support is prioritized at echelons above corps and is influenced by weather conditions and high threat environments. TACAIR response times between acquisition and attack are unacceptable for many targets.

FOTL will be oriented toward the attack of combat forces not yet engaged and the destruction of enemy capabilities which may have either an immediate or deferred impact on the close battle, but which are beyond the range of available cannon and rocket artillery systems.

Soviet Interpretation of FOTL

The Soviets see the implementation of AirLand Battle and Follow On Forces Attack (FOFA) concepts by the Army as a significant change in the development of US military operational art. Both concepts are significant because they grasp the multi-dimensional aspects of modern combat operations at a level above pure tactics. The Soviets have been expecting the West to "discover" operational art for several decades and now the predictions are being fulfilled. (8) The Soviets realize that the

development and procurement of a FOTL will provide significant additional support to both the AirLand Battle and Follow On Forces Attack concepts.(9) They also recognize that the US and its allies are prepared to build a FOTL system. In fact, they have been expecting such a system since the 50s.(10) Davydov, in the August 1988 issue of <u>USA</u> (a Soviet journal), stited that the US "intends to increase the range of the Lance missile to 400 km and to increase the power and broaden the limits of other types of nuclear weapons on the battlefield." (11) This new extended range for the Lance identified by Davydov places the Lance missile system, by Soviet definition, into the operational-tactical missile category(12) (ranges between 184-740 km).(13) This also places the Soviet assessed FOTL at the higher end of the INF 500 km range limit.

The Soviets believe that their concept of force echelonment would be threatened by the NATO ability to conduct deep destructive strikes in their rear areas with air, airborne, airmobile, artillery and missile forces. (14)

According to Dave Zamory, in a report to the Follow-On-To-Lance Study Group, V.G. Reznichenko in the 1987 edition of Taktika stated:

Deep destruction by fire lies as the basis of the Air-land operational concept adopted by the U.S. Army accordingly, targets are distributed of follows in relation to depth: for artillery, in a zone from 1 to 30-40 km, for tactical missile systems—from 10-15 to 60-70 km, for operational missile complexes—from 50-70 to 400-1,000 km... In accordance with the requirements of the concept of Air-land operations, the U.S. Army is working out the methods of deep destruction by fire. In the

division, for example, it is planned to a depth of 100 km.{15}

These Western innovations will have an effect upon Soviet planning. The Soviet wartime planner will be looking at a formidable mirror image of Soviet strategy, operational art, and tactics. The deep destructive fires of ALB and FOFA are designed to achieve the simultaneous annihilation of Soviet multiple attacking echelons. The destruction of their reserves and second echelon forces is assessed by the Soviets to be accomplished by tactical and army aviation, operational-tactical missiles, and field artillery.(16) The identification of operational-tactical missiles as a part of ALB/FOFA further establishes the significance and relevance the Soviets place on the FOTL.

The INF treaty cut a significant number of missiles from the inventories of both the US and the USSR. It did leave room for tactical and some short range operational-tactical missiles, including the continued development of a modernization program. The INF Treaty allows the continued development of ALB/FOFA concepts by NATO including the development of deep strikes by both air and missile assets.

...the removal of the American intermediaterange missiles requires the timely improvement
and increase of tactical nuclear weapons in
correspondence with the program accepted at
the 1983 session of the Nuclear Planning
Group in Montebello. The program intends to
increase the range of the "Lance" missile to
400 km and to increase the power and broaden
the limits of the use of other types of
nuclear weapons on the battlefield. {17}

The Soviets are concerned about an "increased cooperation in the development and coordination of deep attack/battlefield air interdiction programs,"{18} for several reasons. They are concerned that cooperation will support the use of Air Force assets in other roles besides tactical support of ground forces.(19) They do not want to see the Army and the Air Force in a joint effort addressing ALB & FOFA doctrinal concepts. In addition, Soviet commanders and staffs are aware that they may be facing an enemy that is finally solving its own operational problems to the detriment of Soviet operations.(20)

Changes in NATO operational and tactical employment of aviation assets against deep Warsaw Pact targets are recognized as very possible by the Soviets. A deployed FOTL system can free aviation assets for deeper interdiction of attacking or defending Soviet forces. {21}

NATO's Reaction to FOTL

US Secretary of State James A. Baker III, visited all 15 European members of NATO in February, 1989. One of the items on his agenda was to encourage support of the American-made FOTL missile. (22)

Because FOTL will be deployed primarily in West Germany the key decision will be made there. Chancel.or Helmut Kohl has indicated that he wishes to postpone a decision until 1991 or 1992.{23} Elections in West Germany take place in December 1990, and Kohl's strongest rival, West German Hans-Dietrich Genscher, strongly opposes any Lance modernization.{24} Chancellor Kohl

has been hesitant to commit his country to accept the upgrading of the Lance because of widespread public opposition. (25) In the latest polls taken by the Allenbach Institute, 70% of West Germans strongly oppose modernizing the Lance or any other short-range missile. (26) According to a February 17, 1989, Washington Post article, that figure is now up to 80%.

Kohl is concerned about challenging public opinion because of the weak condition of his political party, the conservative Christian Democratic Union (CDU), (27) and the extrordinary success of Gorbachev's "peace initiatives" all over Europe. Experience has taught Kohl that German chancellors who have stood against their voters and sided with the US on such issues have suffered politically. Helmut Schmidt supported Jimmy Carter and the Neutron Bomb in spite of German public opinion opposing the weapon. When Carter suddenly reversed his position, Schmidt was left without US or popular support. (28) The Bush administration will need some kind of positive signal from Bonn if it is to persuade Congress to appropriate money for the continued development and production of a replacement for the Lance.

Support for the modernization of Lance has been strong in other NATO nations, especially Britain(29) and France,(30) for two reasons. First, if the Soviets are successful in blocking US modernization of Lance, it will give them momentum in blocking British and French modernization efforts.(31) Secondly, the British and French see FOTL filling a void in the defense of Europe.

The political unity necessary to carry a positive NATO decision on the Lance modernization may come about eventually.(32) Christopher Bertram, an editor of <u>Die Zeit</u> newspaper, is convinced that "German public opinion can be swung around behind nuclear weapons, especially if talks on reducing conventional and chemical weapons go well."(33) If, however, the controversy is not settled before the NATO summit meeting in May, 1989, a decision will not be made until late 1991 or early 1992.

In spite of uncertain NATO support, the Bush administration wants to begin production of the new Lance missiles so they will be ready for deployment at the appropriate time. Providing that Congress is willing to support this decision without formal acceptance from West Germany, Mr Kohl's desire to postpone a decision on deployment will not hurt. Mikhail Gorbachev's "peace offensive" has been too successful for the US to push West Germany into an immediate but politically untenable decision, and the FOTL could still be available for deployment by 1995. With regard to Gorbachev's "charm offensive," NATO Secretary General Manfred Worner says, "We cannot entrust our security to one person alone, or to intentions. Both can change overnight." (34)

U.S. Congressional Concerns

Congressional support for the FOTL is mixed. Senator Sam Nunn, the powerful chairman of the Armed Services Committee, has stated that he does not favor driving the Germans to the wall on modernizing the short-range Lance missile. (35) He believes that there are ways to keep the nuclear deterrent alive in Europe

without a public outcry. "We could base missiles at sea or on aircraft that the NATO countries already accept."(36) Earlier, in 1984, Senator Nunn teamed up with Senator Kennedy and successfully pushed for a Congressional ban on the development of a nuclear version of the Army's Tactical Missile System (ATACMS) to prod the Pentagon into improving conventional capabilities. Restrictions have since been lifted on researching the ATACMS as a candidate, but the prohibition on development still exists today in the form of the Kennedy-Nunn amendment.(37)

Others on the hill speculate that brisk production of the new missiles would give Moscow an incentive for agreement before FOTL is deployed and therefore are privately advocating that Germans who seek unilateral disarmament should be urged not to scrap a bargaining chip under active negotiation.

Mr Joel Resnick of Science Application International Corporation(SAIC), in a report prepared for the Systems Analysis Working Group (SAWG) of the Follow on to Lance (FOTL) Phase 2 study, presents some factors which will influence Congressional acceptance of the FOTL: 1) the importance of East-West relations and the fear that introducing FOTL may in some way damage that relationship; 2) because the FOTL is a dual capable land-based system, the Soviets may interpret the conventional firing of the weapon as nuclear and immediately escalate to the use of their nuclear weapons; 3) Congressional unwillingness to support programs which our allies have not yet committed to; 4) the fierce competition for DoD development dollars within Congress

despite Presidential support for FOTL. Congress could delay its development by giving it low funding status. (38)

ENDNOTES

- 1. Frank C. Carlucci, "Report of the Secretary of Defense to the Congress on the FY 1990/FY 1991 Biennial Budget and FY 1990-1994 Defense Programs." (Washington D.C.: U.S. Government Printing Office, January 17, 1989), pp. 19-20. Also see Richard L. Armitage, "U.S. Strategic Interests in East Asia and the Pacific," Defense Issues, Vol 2, 1986, p. 1.
- 2. U.S. Department of the Army, The Soviet Army: Operations Tactics, Field Manual 100-2-1, (Washington, D.C.: U.S. Government Printing Office, July 1984). Understanding requirement for echelonment is key here. There are two reasons why many Western analysts believe Soviet offensive action requires echelonment. First, the size of the forces involved and the constraints of terrain in Central Europe physically demand Second, echelonment is needed to support Soviet military art which stresses the need for tempo--the ability to generate and sustain superior combat power and focus that combat power at the decisive point. To synchronize the commitment of echeloned follow-on forces, the Soviets intend to conduct operations in a planned mode, executing the plan (or a variation of it) within the critical time allowed for mission execution.
 - 3. Ibid.
- 4. See Steven L. Canby, "New Conventional Technology and the NATO/Warsaw Pact Balance: Part I, Adelphi Papers IISS #198, 1985, p.7-24. Dr Canby states: "Emerging technologies applied to the deep attack of Follow-on Forces Attack (FOFA) cannot be effective, in principle or practice. FOFA is a concept beyond the capabilities of technology."
- 5. U.S. Department of the Army, Operations, Field Manual 100-5, (Wash,, D.C.: U.S. Government Printing Office, May 1986).
- 6. The specific physical elements and operational role of those Corps commander's targets that would need to be serviced fall under three general categories. The first category, followon maneuver forces, is generally described as the Soviet tank or motorized rifle divisions which make up the second echelon of the lead army or the first echelon of the follow-on army. The second category, command, control and communications (C3), is generally described as the troop and weapon control centers associated with threat army- and division-level activities. The third category, high payoff systems, is a number of specific systems that, because of their destructive ability, mobility, range and/or broad functional impact, are always viewed as relevant targets.
- 7. To support the Corps commander, corps level fire support assets are necessary to attack critical targets using a variety of delivery vehicles (ballistic or cruise) and warheads (dumb and smart) that may be required in varying combinations to conduct deep fires.

- 8. Dave Zamory, "FOTL Range Considerations from a Soviet Perspective," Science Application Incorporated (SAIC), undated, unpublished paper.
 - 9. Ibid.
 - 10. Ibid.
- 11. Davydov, Yu P. "SSHA ZAPADNAYA YEVROPA IDOGOVOR PO RSD-RSM" The U.S., Western Europe, and the Treaty on Medium and Short-Range Missiles, SSHA: Ekonomika, Politika, Ideologiya, No. 7, July 1988, pp 11-12, as cited in Zamory, op. cit..
- 12. Zamory quotes Surikov: "Operation 1-tactical missiles may destroy targets not only of taction but also of operational significance. Their distribution is not connected with a required location in the zone of compat." pp. 11-12.
 - 13. Zamory, op. cit.
- 14. Taken from interview with Mr. Phil Angelotti, Army Research, Development and Engineering Command (ARDEC), at the Army War College on February 18, 1989. Mr Angelotti is the Chairman of the Systems Analysis Working Group (SAWG) of the Follow-on-to-Lance Study group.
- 15. Reznichenko, V.G. Vorob'yev, I.N., et al. <u>Taktika</u> [Tactics]. (2nd edition, revised and supplemented.) <u>Moscow:</u> Voyenizdat, 1987, as cited in Zamory paper, op. cit..
 - 16. Reznichenko, op. cit., p 20.
 - 17. Davydov, op. cit., pp. 11-12.
- 18. R. G. Davis, "The 31 Initiatives: A Study in Air Force-Army cooperation.", (Washington D.C.: Office of Air Force History, United States Air Force, 1987), p. 92.
- 19. Bernard Trainor, "In the Arms Race, Numbers Just One Factor," New York Times, February 5, 1989, p.10. Trainor states that the Warsaw Pact says it fears a surprise attack initiated by the powerful NATO air forces.
 - 20. Reznichenko, op. cit., pp. 178-180.
- 21. Ibid. In addition, Polish Minister Tadeusz Olechowski, in a speech at a meeting of the Warsaw Pact Ministers on April 11, 1989, has called for negotiations with NATO on tactical short-range nuclear weapons. See Washington Post, "Warsaw Pact Urges Talks on Short-Range Missiles", April 12, 1989.
- 22. Thomas L. Freeman, "Baker in Bonn on Thorny Issue of Missile Upgrading," New York Times, February 13, 1989, p. A-3.
- 23. Ibid. In addition, Belgium Prime Minister Wilfried Martens recently told a joint parliamentary commission that his center-left coalition wanted no decision taken on short-range modernization before 1991-1992. See Washington Times, "Belgium Steps into Missile Fray," April 12, 1989, p. 9.
 - 24. Ibid.
 - 25. Ibid.
- 26. Rowland Evans, Robert Novak, "Kohl's Anti-Missile Decision Reflects Precarious Political Position," Patriot, February 17, 1989, p. A-11.
- 27. John M. Gosliko, "Baker Tour Exposes U.S.-West Germany Friction," Washington Post, February 17, 1989, p. 34.

- 28. Sherri L. Wasserman, The Neutron Bomb Controversy: A Study in Alliance Politics (New York: Praeger Scientific, 1983), pp. 110-117.
- 29. Philip Revyin, "Europeans Begin Planning for the Day when U.S. Pulls Troops Back Home, "Wall Street Journal, February 17, 1989, p. A-10.
- 30. Ibid. The French have consistently urged the Germans to go along with the replacement of obsolete U.S. Lance missiles in Germany.
- 31. John Prados, Joel S. Wit & Michael J. Zagurek, Jr. "The Strategic Nuclear Forces of Britain and France, "Scientific America, Vol. 255, No. 2, August 1986, pp. 33-41.
 - 32. Ibid.
 - 33. Revyin, op. cit.
- 34. "Charm Offensive," Christian Science Monitor, February 2, 1989, p. 20.
- 35. Michael Kramer, "Smart, Dull and Very Powerful: Sam Nunn," Time, March 13,1989, p. 30.
- 36. Ibid. 37. Taken from interview with Phil Angelotti, op. cit. February 19, 1989.
- Resnick, SAIC, "U.S. Political/Military/Economic 38. Joel Trends, "Report to the Systems Analysis Working Group of the FOTL Phase 2 Study on June 1,1988.

CHAPTER III

PAST SOVIET ACTIONS AND REACTIONS

I cannot forecast to you the action of Russia. It is a riddle wrapped in a mystery inside an enigma.

Sir Winston Churchill {1}

The two most ridiculous statements I know are, "Liquor doesn't affect me," and "I understand the Russians."

Charles Bohlen, Former U.S.

Ambassador to the USSR. {2}

Between 1979 and 1983, the Soviets employed a variety of tactics during the controversy over Intermediate-Range Nuclear Forces (INF). Disinformation, political ultimatums and threats of military reprisal were employed in an unsuccessful effort to prevent initial INF deployments (Pershing IIs and GLCM). As was the case with Berlin some twenty years earlier, the Soviets were trying to force NATO to accept a political solution on Soviet terms.(3) This section will describe and analyze the Soviet response to INF deployment in an effort to identify past political-military responses to US actions which were perceived by the Soviets to affect the "correlation of forces."

The Dual Track Decision of 1979

In the mid 1970's, the Soviet Union deployed the SS-20 ballistic missile. This triple-headed (MIRV) system shifted the balance of nuclear forces in Europe to the advantage of the Soviets. NATO's response to the deployment was to warn that it would position similar intermediate-range nuclear weapons in the

European theater to restore the nuclear balance. This 1979 initiative was dubbed the "Dual Track Decision" because it proposed two efforts. One was the deployment of new long-range land-based theater nuclear forces, consisting of 572 Pershing II ballistic missiles (PIIs) and ground launched cruise missiles (GLCMs), as a necessary reaction to the Soviet SS-20 missile system and the newly introduced Backfire Bombers. (4) The second part was a proposal to initiate negotiations with the Soviet Union on the limitation of U.S. and Soviet land-based longer range intermediate nuclear forces. (LRINF)

The Soviet reaction to that proposed deployment was to refuse to seriously discuss the issue at all, choosing instead to begin a large scale disinformation campaign. While debate continued in NATO about how to deal with the SS-20 situation, demonstrations against NATO's deployment of additional nuclear weapons were taking place throughout Europe. Many of the demonstrations were organized by international front organizations sponsored in part or in full by the USSR.

Why would the Soviets choose to ignore NATO's warnings? The answer to this question begins with the reasons why the Soviets were deploying the SS-20's. If this aspect of the Soviet initiative had been thoroughly explored at the time, (5) there may have been less surprise that the Soviets went ahead with the planned deployment in spite of the NATO counter build-up.

The Soviets had both technical and political reasons for deploying new Intermediate Range Ballistic Missiles (IRBMs).

During the mid 1950's and 1960's, the Soviets had given priority to deployment of regional strategic forces in the Eurasian theaters. This included the bomber build-up of the mid-1950's and the strategic missile build-up of the late 1950's and early 1960's. From the mid 1960's to mid 1970's, the Soviet emphasis had been to bring their intercontinental forces up to parity with the United States. In the meantime, the intermediate range SS-4's and SS-5's had become outdated and vulnerable, and their replacement became the next high priority. (6) According to the Soviets, the decision to build and deploy the SS-20's was based on several factors, the principal factor being modernization. (7)

The factor the Soviets neglected to consider was potential reaction of the West. They were unprepared for the political and military outcry that the SS-20 deployment constituted a sneaky, opportunistic and dangerous escalation of the arms race. The build-up of SS-20's increased the Western perception of the Soviet threat and caused resultant problems for NATO contingency planners. Robert Jervis' concept of the "Security Dilemma" describes the situation aptly: "an increase in one state's security decreases the security of the others."(8)

There has been, however, some doubt that the introduction of the SS-20's really signified a change in Soviet intentions. The SS-20 system may have simply been intended as a "modernization" of the aging SS-4's and SS-5's. Those who support George Kennan's theories believe that the US over-militarized its interpretation of the Soviet-Western relationship. (9) The fact

remains, however, that the SS-20 is more accurate and a great deal more mobile than the older weapons, and can threaten a wider range of NATO targets.

The Soviet perception of the need to build up a weapon system is generally built upon their perceptions of an external threat. While they frequently exaggerate these external threats for propaganda reasons, there is often more than a small amount of truth in the Soviet threat perception, when considered in light of their values and perspectives. Appreciating Soviet fears may mean accepting that they did see the SS-20 deployment as a "modernization" and that the NATO deployment of the Pershing II and GLCM really was perceived by the Soviets as a dangerous "escalation." If that interpretation is accepted, it follows that the Soviet position on Intermediate-Range Nuclear Forces (INF) in the late 1970's and early 1980's may not have been designed for the arms control negotiations but was in fact the outgrowth of a policy pursued for over twenty years. (10) The Soviets feel that the INF crisis was created by the West, and like the Americans, find it hard to believe that their own actions - such as modernization - could cause such fear.

The resulting political controversy was many-faceted. In spite of the Soviet-sponsored demonstrations against NATO's intended deployment of PIIs and GLCMs, the perception in Western Europe and Asia was that the danger inherent in increased Soviet nuclear potential was too great to be ignored. Gromyko, the Soviet foreign minister, attempted to gain West German support by

exerting pressure on behalf of the Social Democrats in the West German general elections. Even the Soviet General Secretary, Yuri Andropov, exerted pressure on the West Germans, warning Chancellor Kohl in July 1983 of the dangers of deploying more US missiles in West Germany. {11}

In spite of Soviet efforts to the contrary, however, the PII and GLCM deployments proceeded as planned. In a facesaving show of disgust, the Soviet delegation walked out of the Geneva talks on limiting nuclear weapons. They responded to the PIT and GLCM deployment by announcing their intention to install SS-21. SS-22 and SS-23 systems in East Germany and Czechoslovakia. This announcement caused a great deal of dismay in Czechoslovakia and some skepticism in Western Europe because of the Soviets' long standing policy not to deploy recent generation weapons on satellite territories. (12)

The Neutron Bomb Debacle

The Soviets also responded strongly to the US effort to introduce the Enhanced Radiation Weapon (ERW), or the neutron The first public disclosure of US intent to appropriate bomb. ERW project occurred in a June 1977 article by funds for the Walter Pincus Washington Post. (13) The Soviets in the immediately mounted a substantial overt propaganda campaign to influence Western opinion against the neutron bomb. Shortly after Congress approved funding for the bomb, the Soviets attempted to mobilize international opinion against the Carter deploy the weapon. Aimed at administration's plan to

misrepresenting a US/NATO deployment decision, the loviet objective was to divide the alliance by implying that the US was the "architect" of a policy which would lead to war in Europe. {14}

Using tactics similar to those employed in 1961 and 1962 when the neutron issue was first raised, the Soviets began a disinformation campaign against the weapon itself - saying it lowered the nuclear threshold and was potentially inhumane. Finally, the Europeans were described as willing victims to the possibility of nuclear war on their own territory. (15) This campaign was launched in spite of the fact that these enhanced radiation warheads were a defensive antitank weapon initially intended to counter Soviet superiority in conventional weapons in Europe. (16)

The Soviets unleashed the many resources of their propaganda, disinformation, and political warfare organizations to counter the deployment of the neutron bomb. (17) In this case, the specific propaganda goals were unsuccessful because approval was granted by the Western European nations to deploy the neutron bomb. The subsequent US decision not to deploy was made solely by President Jimmy Carter and was based not upon lack of NATO cooperation, but rather Carter's own personal feelings about the destructiveness of the weapon. (18)

A 1984 study, <u>Dezinformatsia</u>, by Shultz and Godson concludes that "propaganda and political influence techniques do in fact constitute significant instruments of Soviet foreign

policy and strategy."(19) In a study of potential soviet reactions to FOTL, the influence of propaganda and political warfare are significant for two reasons: 1) The Soviets have a history of using "political warfare."(20) 2) The long-standing use of propaganda by the Soviets to influence perception and decision-making has resulted in the Soviet belief that all other governments use the same tactics. Thus, any new Western military development is likely to be viewed with skepticism and distrust.

US State Department reports and CIA testimony in 1982 hearings before the House Intelligence Committee charged that a high level of active measures continues. {21} State Department Special Report No. 110, released in September 1983, stated that these activities "have grown in boldness and intensity, reflecting what appears to be an increased use of active measures as a policy instrument by the Soviets and their allies."{22} The purpose of Soviet deception and disinformation is and always has been political. The Soviets strongly believe that it is necessary to induce foreign activities and developments that will be beneficial to Soviet strategic purposes. These tactics have become institutionalized and involve the senior Party leadership as well as Soviet security services.

Propaganda and political influence have been used by the Soviets for decades and must be considered major factors in any analysis of Soviet response. Deception and disinformation are officially sanctioned activities, as evidenced by the existence of three "Active Measures" departments within the CPSU. (23) As

was illustrated by the disinformation campaigns launched against the PIIs and GLCMs and against Enhanced Radiation Weapons, the Soviet, believe that these tactics can be effective in achieving political and military objectives.

ENDNOTES

- 1. Statement by Sir Winston Spencer Churchill on 1 Oct 39, as cited by John Bartlett, <u>Familiar Quotations</u> (14th ed.; Boston: Little, Brown, and Company, 1968), p. 920.
- 2. Statement by Charles Bohlen, cited in Readers Digest, 110 (January, 1977), p. 82.
- 3. Zbignew Brzezinski has called INF the "functional equivalent of the Berlin Crisis of the 1950's and 1960's." See "The Future of Yalta," Foreign Affairs, 63 no.2 (Winter 1984/85), p.290.
- 4. The official NATO Nuclear Planning Group (NPG) communique of 12 December 1979 justified the need to deploy NATO long-range TNF systems as a response to an aggravation of the strategic situation. This communique was issued at a special meeting of the NATO Foreign and Defense Ministers in Brussels. See Modernization of NATO's Long Range Theater Nuclear Forces, report prepared by the Congressional Research Service (Washington, D.C.: Government Printing Office, 1981) Appendix 6, p. 66. Also, the 572 new nuclear warheads included 108 Pershing II extended range ballistic missiles in five NATO countries (West Germany, Great Britain, Italy, B-lgium and the Netherlands).
- 5. Soviet motives were assumed rather than determined. "This was confirmed in interviews with many U.S. and European participants in the Western alliance decision process," according to Raymond L. Garthoff in "The Soviet SS-20 Decision" in Survival, May/June 1983, p. 110. The Western assumption was that the Soviet Union saw an opportunity to gain political-military advantage and leverage over Europe through deployment of the SS-20.
- 6. For an excellent discussion on the problems the Soviets had in developing a replacement for the SS-4 and SS-5's, see Robert P. Berman and John C. Baker, Soviet Strategic Forces: Requirements and Responses (Washington: Brookings Institute, 1982).
- 7. Raymond L. Garthoff, "The Soviet SS-20 Decision", <u>Survival</u> (May-June, 1983), No. 3. pp. 110 and 112. Also discussed in other Soviet nuclear strategy references such as Steven J. Cimbala, "Soviet Nuclear Strategies: Will They Do the Expected?", <u>Strategic Review</u>, Fall 1985, pp. 67-77.
- 8. Robert Jervis, "Cooperation Under the Security Dilemma," World Politics, Vol. 30 (2), January 1978, pp. 167-214.

- 9. George F. Kennan, The Nuclear Delusion. Soviet-American Relations in the Atomic Age (London: Hamish Hamilton, 1984).
- 10. David Holloway, "Theater Nuclear Weapons: the Soviet Doctrine," pp. 89-104 in Mary Kaldon and Dan Smith, Disarming Europe (London: The Merlin Press, 1982).

 11. Newsweek, July 18, 1983, pp. 34-36.
- 12. Mikhail Heller "Andropov: A Retrospective View," Survey, Vol. 28, No. 1 (120), Spring 1984, p. 55. Also see <u>Pravda</u>, October 25, 1983 and <u>U.S. News and World Report</u>, April 4, 1984.
- 13. Walter Pincus, "Neutron Killer Warhead Buried in ERDA Budget, "Washington Post, June 6, 1977.
- 14. Richard H. Shultz and Roy Godson, DEZINFORMATSIA: Active Measures in Soviet Strategy (New York, Berkley Books, May 1986), p. 75.
 - 15. Ibid, p. 76.
 - 16. Ibid.
- 17. For an analysis of the USSR's propaganda campaign against the neutron bomb, see Steven D. Syms and Edward Snow, Jr., "Soviet Propaganda and the Neutron Bomb Decision," Political Communication and Persuasion, 1 (No. 3, 1981), 257-68 and Sherri Wasserman The Neutron Bomb Controversy: A Study in Alliance Politics (New York: Praeger Publishers, 1983). See also Shultz and Godson, op. cit., pp. 76-78 and pp. 123-127.
 - 18. Wasserman, op. cit.
 - 19. Shultz and Godson, Dezinformatsia: op. cit., p. 2.
- 20. Anatolly Golitsyn. New Lies for Old: The Communist Strategy of Deception and Disinformation (New York: Dodd, Mead and Co., 1984). Also see Ronald Hingley, The Russian Mind, New York: Charles Scribner's & Sons, 1977), Chapter 2.
- 21. US Congress, House, Soviet Active Measures, Hearings before the Permanent Select Committee on Intelligence of the House of Representatives (Washington: GPO, 1982), "Soviet Active Measures: Forgery, Disinformation, Political Operations," State Department Special Report No. 88 (Washington: US Department of State, "Soviet Active Measures: An Update," October 1981); Department Special Report No. 110 (Washington: US Department of State, September 1983).
 - 22. State Department Special Report No. 110, p. 1.
- 23. Report of a Study Group of the Institute for Conflict Studies, "The Strategic Intentions of the Soviet Union" (London: Institute for Conflict Studies 1978), pp. 13-14., as cited in Shultz and Godson, op. cit., p. 201.

CHAPTER IV

THE INFLUENCE OF SOVIET PERCEPTIONS

Soviet reactions to the development and subsequent deployment of FOTL will be conditioned by many factors, both subjective and objective. The most important subjective factor is perception - how the Soviets perceive and understand this US action and how they perceive themselves in terms of current purpose, role, strengths, and weaknesses. The objective factors which condition Soviet reactions include: 1) the Soviet geopolitical situation; and 2) the correlation of forces.

Images of the external world and self-image are based upon experience and cultural heritage, are formed over a long period of time, and are constantly reinforced. As a result, the Soviet images of itself and of the United States have considerable Perception is not a process which sends the mind a inertia. photograph-like image of reality. It is a selective process in which incoming data is more readily retained and understood when it fits pre-existing images - the mind "sees what it wants to Therefore, when objective factors such as the force see." are changed, Soviet posture and force structure of NATO decisionmakers may not perceive the changes as would their Western counterparts. They are predisposed to interpret events images of geography, ideology, according to pre-existing correlation of forces, and military doctrine.

One of the most important components of the Soviet selfimage is its geographical position in the heartland of the Eurasian continent.(1) Throughout its existence, Russia has been faced with geopolitical and historical factors which have traditionally impacted on the nature of its objectives and strategies. Russia has been vulnerable to and the victim of military threats and invasion from both West and East. The result is an ongoing national sense of military insecurity.(2)

Marxist-Leninist ideology, which is the foundation of Communist thought, promotes the perception that the world is divided into two opposing systems: capitalism and communism. According to this ideology the two systems are locked in a life and death struggle which, based upon the Marxist-Leninist interpretation of history, is predestined to favor communism. (3) Because victory is not yet assured, however, it must be pursued with all available resources against a number of enemies, including the United States. Thus, the Soviets do not consider recent agreements with the United States to be steps toward the convergence of capitalism and communism. These are tactical not be interpreted as strategic should which agreements compromises with capitalism. This ideological perception for the most part precludes compromise on fundamental issues.

approach to strategic and tactical problem solving differs from that of a Westerner. Soviet strategists and commanders are encouraged to approach strategic problems in accordance with Marxist dialectics. (4) This ideological background predisposes the USSR to maximize power in appearance and reality throughout

the world. Soviet leaders perceive that Western capitalists are devoted to diminishing or containing that power on a worldwide scale. Any weapon modernization or new weapon development initiated by the West will be analyzed within the context of this perception and assessed as hostile to Soviet objectives.

The perceived "correlation of forces" (5) in the world is also an important factor in Soviet military decisionmaking. Contemporary Soviet analysis indicates that a qualitative shift in the world correlation of forces occurred in 1972(6) when the Soviets reached strategic nuclear parity with the United States.(7) The Soviets believe that the US can no longer deal in international relations from a position of strength and must accept the Soviet policy of "peaceful coexistence." (8) The political utility of military strength has become a fundamental cornerstone of Soviet policy as seen in the development of the Red Army since 1945, the 1956 decision to develop the Soviet Navy, and the 1967 and 1973 wars in the Middle East. (9) Soviet leaders anticipate that their international influence and prestige will grow in proportion to the Soviet capability to achieve military superiority over the West. (10) While there is speculation that the Soviet leadership has stepped back from this position and now speaks in terms of "sufficiency," (11) and while Gorbachev expresses the notion that military strength is not enough to remain a global power, the Soviets are not likely to concede their position as a military super power.

Soviet military doctrine is a highly specific, well-

formulated body of principles common to both the Armed Forces of the Soviet Union and the Communist Party of the Soviet Union (CPSU). The Party political leadership of the USSR is central in doctrine. {12} the formulation of Soviet military propositions of Soviet military doctrine contain features of Soviet ideology and illustrate the present and future orientation of the doctrine as a set of guiding principles. {13} political and military-technical aspects of Soviet military doctrine have important implications for future Soviet behavior in military affairs because of the prescriptive and predictive content of the doctrine. (14) It incorporates important features of Soviet ideology in its set of guiding principles as well as a realistic appraisal of the characteristics and nature of war Thus, as the official policy of fought by contemporary means. the Party and military hierarchy, military doctrine provides a common theoretical foundation and vantage point from which Soviet military analysts and decisionmakers interpret and explain actions and events in the external Under these world. circumstances, Soviet military doctrine exercises influence on the perception and responses of Soviet decisionmakers confronted by the US development and deployment of FOTL.

ENDNOTES

^{1.} B. Byely, et. al., Marxism - Leninism on War and Army (A Soviet View) (Moscow: Program Publishers, 1972). Translated and published under the auspices of the United States Air Force. Soviet Military Thought # 2. (Washington: G.P.O., 1976),p.56.

2. Jonathan Steele, Soviet Power, op. cit., Chapter II.

^{3.} B. Byely, et. al. Marxism-Leninism, op. cit.

- 4. B.M. Boguslavsky, et. al., ABC of Dialectical and Historical Materialism, op. cit., Chapter II; and see R.N. Carew Hunt, The Theory and Practice of Communism, op. cit., pp. 24-25.
- Hunt, The Theory and Practice of Communism, op. cit., pp. 24-25.

 5. Perceptions spring from many roots (ideological, cultural, and historical), yet military views tend to be formalized in methods of assessment. For example, Western assessments routinely speak in terms of "balance of power" while Soviet assessments are obsessed with the "correlation of forces." is a very different way of looking at what appears to be the same issue. Yet, balance of power estimates tend to focus on sterile ratios of military forces while Soviet "correlations" embrace a broader realm of dynamics that include, but are not limited to, (They include economic forces, scientific military forces. potential, military forces, and qualitative/quantitative changes in military equipment.) In the Soviet view, the correlation of forces has been shifting in favor of the socialists since the "Soviet defeat" of Nazi Germany in World War II. Current indicators are that the Soviets now believe a strong economy must be achieved in order to prevent a shift in the correlation of "The correlation of forces in favor of the capitalist world. forces is determined by means of a comparison of existing data on the quantitative and qualitative descriptions of subunits, units, combined units, and armaments of one's own forces and those of the enemy. Correlation of forces is determined on strategic, operational, and tactical scales." In addition, Soviet political and military theorists compare the socialist and capitalist camps through their assessment of the correlation of forces. They compare the relative political, moral, economic, and military strengths of both sides.
- 6. Interview with LTC (Dr) Gil A.Bernabe, ODCSOPS, DAMO-SWN, 4 May, 1987.
 - 7. Jonathan Steele, Soviet Power, op. cit., pp. 45-46.
- 8. N. Kapchenko, "Socialist Foreign Policy and the Restructuring of International Relations," International Affairs, Moscow, No. 4, April 1975.
 - 9. Interview with LTC (Dr) Gil Bernabe 4 May, 1987.
- 10. N. Kapchenko, op. cit., p. 8. The cornerstone of this policy entailed the avoidance of direct conflict with the West, while enhancing Soviet power and military capabilities for an ultimate and decisive clash.
- 11. Whether it is called "reasonable sufficiency" (as Gorbachev and his civilian analysts call it) or "defense sufficiency" (as his military writers refer to it, implying more traditional requirements) the Soviets have placed a greater emphasis on defense, especially regarding conventional forces in Europe. This thrust is supposed to appear as a Soviet withdrawal from their "offensive" strategy and a desire on their part to ease the minds of NATO in general, and Western Europeans in particular.
- 12. Major General S.N. Kozlov, The Officers Handbook (Moscow: Voyenizdat, 1971), translated under the auspices of the U.S. Air Force, Soviet Military Thought #13 (Washington, D.C.: U.S. GPO, 1977), p. 62-63.

Considerable reference has been or will be made throughout this study to the book series Soviet Military Thought. This is a translation of the Soviet "Officer's Library" (a publication of a series of volumes by Voenizdat, Moscow, for the Soviet Ministry of Defence) carried out in the USA under the auspices of the USAF. The collection consists of the following titles: (Descriptions of Volumes 1-14 taken from a footnote in Hemsley, Soviet Troop Control).

- Vol. 1. Sidorenko, A.A., The Offensive. Presents the Offensive as the only type of combat operation which attains complete rout of the enemy.
- Vol. 2. Collective Authorship, <u>Marxism-Leninism on War and Army</u>. Discusses doctrine, modern military power and the revolution in military affairs.
- Vol. 3. Lomov, N.A. (ed.), <u>Scientific-Technical Progress and the Revolution in Military Affairs</u>. <u>Discusses the impact of science and technology (including nuclear weapons)</u> on military developments.
- Vol. 4. Savkin, V. Ye., The Basic Principles of Operational Art and Tactics. Presents the "essence of the laws of armed conflict, their use and their dialectical relationship with principles of military art".
- Vol. 5. Milovidov, A.S. and Kozlov, V.G. (eds), The Philosophical Heritage of V.I. Lenin and Problems of Contemporary War. Outlines the Party approach to problems relating to war, the armed forces, military affairs and communist ideology.
- Vol. 6. Druzhinin, V.V. and Kontorov, D.S., Concept Algorithm, Decision. Integrates ideas from philosophy, psychology, social science, mathematics and linguistics for the military commander and his staff.
- Vol. 7. Danchenko, A.M. and Vydrin, I.E. (eds), Military Pedagogy. Discusses Soviet political, combat and technical training to enhance combat readiness.
- Vol. 8. Shelyag, V.V., Glotochkin, A.D. and Platonov, K.K. (eds), <u>Military Psychology</u>. Appraises man's psyche under both nuclear and conventional warfare conditions to gauge effective ways to indoctrinate personnel.
- Vol. 9. Radzievskii, A.I. (senior ed.), Dictionary of Basic Military Terms. Basically this is a small military encyclopedia which defines Soviet military terminology. Compiled by the faculty of the General Staff Academy.
- Vol. 10. Yegorov, P.T., Shlyakov, I.A. and Alabin, N.I., Civil Defence. Textbook providing a comprehensive overview of the Soviet war survival programme.
- Vol. 11. Selected Soviet Military Writings 1970-75. Soviet writings on the international situation, theoretical foundations of Soviet military thought, the command structure and military organization and theory in practice.
- Vol. 12. Grechko, A.A., The Armed Forces of the Soviet State. The late Soviet Minister of Defence's most comprehensive work, covering the development and essence of Soviet military power.

Vol. 13. Kozlov, S.N. (ed.), The Officer's Handbook. This handbook is intended to help "officers in broadening their outlooks and in resolving many practical problems related to the training and education of subordinates."

Vol. 14. Skirdo, M.P., The People, The Army, The Commander. An examination of the political, moral, administrative and leadership factors that, according to the author, bring victory in a thermonuclear war.

Vol. 15. Vasil'yev B.A., Long-Range Missile-Equipped - An account of the main phases in the development of Long-range aviation and its combat operations.

Vol. 16. Chuyev, Yu.V., Mikhaylov, Yu.B., Forecasting in Military Affairs. This book provides a broad review on an international scale of Soviet thinking (early 1970's) on the subject of scientific planning, forecasting, and decisionmaking as it relates to the military.

Vol. 17. Kozhevnikov, M.N., The Command and Staff of the Soviet Army Air Force in the Great Patriotic War 1941-1945. Demonstrates the activities of the Soviet Army Air Force command, the work of the staff, and the contributions made by Stavka representatives in coordinating the operations of the aviation of several fronts and long-range aviation.

Vol. 18. Ivanov, D.A., Savel'yev, Shemanskiy, P.V. Fundamentals of Tactical Command and Control. This book brings to light general theoretical principles for tactical command and control, and indicates the place of the theory of control in the overall system of military theoretical knowledge and its relationships to cybernetics and other sciences.

Vol. 19. Tyushkevich, S.A. The Soviet Armed Forces: A History of their Organizational Development. This book is devoted to the problems attending the growth of the Soviet Armed Forces. Primary focus is to the organizational development during the years between the two world wars.

Volumes 15-19 were published under the requirements of the Universal Copyright Convention, to which the Soviets became signatories in 1973. Under these circumstances, publication in the U.S. required that a copyright release be obtained. This was granted in each case with the stipulation that the translation not include the "conclusion" section.

13. Mikhail V. Frunze was a self taught military commander between 1917 and 1921. He effected many military reforms during the period 1921-1924 as deputy chairman of the RVS (RevVoensovet) of the USSR. On 11 March 1924, he became chief of staff of the Red Army and on 24 January, 1925, replaced Trotsky as chairman of the RVS of the USSR. He died in October, 1925 undergoing medical treatment and is said to have been murdered on Stalin's order. (He laid down the theoretical basis of Soviet military doctrine.)

14. Kozlov, Officers Handbook, op. cit., pp. 62-63.

CHAPTER V

SOVIET RESPONSES TO FOTL: A PROJECTION

Soviet reactions thus far to FOTL development and consideration of the Soviet frame of reference indicate that it is not necessary to undertake a drastic reevaluation of the impact of developing or deploying FOTL. There is, however, ample evidence that any US modernization initiative which is perceived by the Soviets as substantially altering the "correlation of forces" (CoF) in Europe (or elsewhere in the world) will evoke some form of response. Based upon Soviet concerns about improved US AirLand Battle doctrine, the perception of a shift in CoF brought about by FOTL is obvious.

This response is likely, however, to be asymmetrical rather than a mirror image of the US/NATO initiative. Political responses (such as in one of the Strategic Arms Reduction Talks or Mutual and Balanced Force Reduction negotiating groups) and tactical realignment (relocation of air assets, rear area movement in smaller convoys, etc.) are more likely than major technological responses (such as tank or personnel carrier redesign, or the development of a new anti-aircraft missile system) or changes in doctrine or strategy.

The reason for the Soviets' limited response is that there are currently more important factors than FOTL influencing Soviet decisionmakers. These include the momentum of ongoing Soviet

economic and political programs, ideological and methodological biases, and perceptions of Western strengths and vulnerabilities. The Soviet offensive/defensive strategy in Europe is unlikely to be defeated or revised as a result of a single US/NATO modernization effort in a single technological area.

Political Responses

The Soviets' evolving foreign policy under Gorbachev seeks to avoid confrontation and rew commitments.(1) Despite frustrations, relations with the United States remains the central preoccupation of Gorbachev's objectives. "There is no getting away from each other," Gorbachev observed in his book, Perestroika. "It is the key to everything else: reducing the danger of nuclear war, reducing military costs, increasing trade, and resolving the main international issues."(2) In light of these considerations, it is likely that any political response by the Soviets will be influenced by its possible effect on American as well as European public opinion. These political responses may include a broad scope of activities intended to undermine NATO FCTL support.

Propaganda

Gorbachev will appeal to European fears in order to affect the US negotiating posture and to make the FOTL deployment as controversial as possible. The Soviets will stress that the range of FOTL will threaten to upset the overall balance in Europe. After explaining to the world that the US is once again endangering it with deployments of nuclear missiles into Europe,

the Soviets are likely to push harder for a 300 km nuclear-free corridor in central Europe.(3) Gorbachev will undoubtedly reiterate the statement he first made during the East German Eleventh Party Congress in April 1986. "I have extended the geographical zone of reductions to all of Europe 'from the Atlantic to the Urals' for the Mutual and Balanced Force Reductions(MBFR) talks. As I have stated very clearly before, the most dangerous kinds of offensive weapons must be removed from the zone of contact." This type of pronouncement will most likely be followed by such rhetoric as "Now we once again have the US, under the guise of modernization, placing more nuclear weapons around the world."

Coercion

To erode MATO cohesiveness, Soviet concessions may be offered such as economic incentives or disincentives in exchange for an agreement to refuse or delay FOTL deployment in one of the NATO countries. If such an approach were successful, it could negate any effect the FOTL might have on Soviet strategy. In addition, bilateral agreements with individual NATO countries, especially the Federal Republic of Germany, will likely be pursued with the aim of separating the interests of the US and the NATO nations ("decoupling").

Arms negotiations

During upcoming conventional arms talks, the Soviets may offer to withdraw SCUD, FROG and SS-21 short-range missiles from Europe and Western USSR if NATO agrees not to modernize the Lance.

International Peace Organizations

The Soviets will attempt to influence world public opinion to oppose the US development and deployment of FOTL through international front organizations such as the World Peace Council.(4) They will continue the "peace offensive," projecting themselves as peace makers. In addition, Soviet awareness that churches and religious institutions are important in the formation of public opinion in the US will result in attempts to sway religious groups against military spending, particularly for FOTL development.(5)

Military Responses

The short-term Soviet military response to FOTL is not likely to involve the development of bigger or better weapons systems, or to include the use of force in efforts to counteract the effectiveness of a deployed FOTL. Moreover, long-range Gorbachev initiatives make the economic demands of such military action highly unlikely. Immediate military responses will be based upon the u 2 of existing or upgraded resources. Since the Soviets have been expecting a modernized Lance for some time, they probably have their own plans for a system which counters FOTL, such as a SCUD with increased range and survivability.

The main Soviet concern about a more effective FOTL is that it will free up additional NATO tactical and fighter-bomber aircraft for deep interdiction missions. This concern will force them to reallocate air defense assets presently assigned or develop a new anti-aircraft missile system or both.

Greater emphasis on surprise, speed and mobility in combat operations might be instituted, including efforts to improve readiness capabilities and reduce NATO warning and detection opportunities (especially in the second echelon). Efforts to develop and/or improve electronic warfare and countermeasures to degrade NATO command and control and target acquisition systems may be enhanced. Emphasis on nuclear and chemical warfare munitions for tactical operations may also be increased.

The proliferation of offensive chemical warfare and theater nuclear weapons to Warsaw Pact forces may be considered, but is unlikely. (This may be verbally expressed but it is doubtful that the Soviets would decide to provide these assets to non-Soviet forces.) There may be a renewed emphasis of the Soviet forward basing of missiles and a change in aviation roles from that of defense to deep interdiction and tactical support missions.

Conclusions

There are many courses of action that the Soviets may pursue in response to FOTL. These actions will be taken after careful analysis of FOTL capabilities. This will be done to determine any weaknesses that the Soviets can exploit. In addition to political efforts to prevent the system's development, the Soviet military will plan for the deployment of FOTL.

Are the actions of the Soviet Union still "a mystery wrapped in a riddle inside an enigma"? US understanding of how the Soviets view the world and why past political/military events have evoked the types of Soviet reactions they have is critical

to a more dependable ability to project Soviet responses - a requirement that will become increasingly important in dealing with Gorbachev and the Soviet Union of the next century.

ENDNOTES

Marshall D. Shuman, "The Super Powers: Dance of the

Dinosaurs," Foreign Affairs, Vol 66, No. 3, 1987/38, p. 499.
2. M.S. Gorbachev, Perestroika: New Thinking for Our Country and the World, (New York: Harper and Row, publishers, 1987).

- 3 Ralph Earle II and Elliot L. Rv. hardson, "Building on Gorbachev's Cuts in Europe," New York Times, December 8, 1989, p. A-35.
- 4. The World Peace Council(WPC) has operated as the principal Communist international front organization for almost forty The principal goals of Soviet propaganda and of international front organizations such as the WPC are: 1) to weaken US and NATO (decoup'ing); and 2) to extol the achievements of the Soviet Union, thereby creating a favorable environment for the advancement of Moscow's objectives. For an excellent review of the WPC and other international front organizations see Richard H. Shultz and Roy Godson, DEZINFORMATSIA: The Strategy of Soviet Disinformation (New York: Berkle; Books, May, 1986).

 Federal Bureau of Investigation (FBI) "Soviet Active Measures in the U.S. Target Unions, Religion, Madia Groups. ROA

National Security Report, 1988, p. 11.

BIBLIOGRAPHY

1. BOOKS

- Adelman, Jonathan R. <u>Terror and Communist Politics: The</u>
 Rise of the Secret Police in Communist States. Boulder:
 Westview Press, 1984.
- Adomeit, Hannes. Soviet Risk Taking and Crisis Behavior. Winchester: Allen and Unwin, 1984.
- Akhmel, Lieutenant General, Editor. Education of the Soviet Soldier: Party-Political Work in the Soviet Armed Forces. Moscow: Progress Publishers, 1972.
- Alford, Jonathan. The Soviet Union: Security Policies and Constraints. New York: St. Martins, 1985.
- Arbatov, Georgi A., and Oltmans, William. The Soviet Viewpoint.
 New York: Dodd, Mead and Co., 1983.
- Aspaturian, Vernon V. Process and Power in Soviet Foreign Policy. Boston: Li tle, Brown and Company, 1971.
- Barron. John. KGB Today: The Hidden Hand. New York: Readers Digest Press, 1983.
- Baugh, William H. The Politics of the Nuclear Balance
 Ambiguity and Continuity in Strategic Policies. / York & Ponder: Longman, 1984.
- Berman, Robert P. and Baker, John C. <u>Soviet Strategic Forces:</u>
 Requirements and Responses. Washington: Brookings
 Institute, 1982.
- Bethlen, Steven and Volgyes, Ivan, eds. Europe and the Superpowers: Political, Economic and Military Relations. Boulder: Westvlew Press, 1985.
- Bialer, Seweryn. The Soviet Paradox: External Expansion, Internal Decline. New York: Alfred A. Knopf, 1986.
- Bittman, Ladislav. The KGB and Soviet Disinformation: An Insider's View. Washington, D. C.: Pergamon Brassey, 1985.
- Bittman, Ladislav. The Deception Game. Syracuse, N.Y.: Syracuse University Research Corps., 1972.

- Boguslavsky, B. M., et. al. ABC of Dialectical and Historical Materialism. Translated by Lenin Iliskaya. Moscow: Progress Publishers, 1977.
- Booth, Ken. Strategy and Ethnocentrism. London: Croom Helm, 1979.
- Brams, S. Superpower Games. New Haven: Yale University Press, 1985.
- Brodie, Bernard. War & Politics. London: Cassell, 1973.
- Brucan, Sylvia. The Post-Breszhnev Era: An Insider's View. New York: Praeger, 1983.
- Byely, B. Marxism-Leninism on War and Army (A Soviet View).

 Moscow 1972. Translated and published under the
 auspices of the U.S. Air Force. Soviet Military
 Thought # 2. Washington D.C.: Government Printing
 Office, 1973.
- Caldwell, Lawrence T. and Diebold, William. Soviet American Relations in the 1980's, Super Power Politics and East West Trade. New York, N.Y.: McGraw Hill Books Company, 1981.
- Cherednichenko, M.I. "On Features in the Development of Military Art in the Postwar Period." In <u>Selected Soviet Military Writings</u>, 1970-75: A Soviet View. Washington, D.C.: U.S. Government Printing Office, 1977.
- Clark, Richard W. Soviet Views on Tactical Nuclear Weapons.
 Oberammergau, Germany: U.S. Army Field Detachment "R,"
 Institute of Advanced Russian Studies, 1962.
- Clausewitz, Carl Von. On War. Princeton: Princeton University Press, 1984.
- Cockburn, Andrew. The Threat: Inside the Soviet Military
 Machine. New York: Random House, 1983.
- Cohen, Stephen F. Rethinking the Soviet Experience: Politics and History since 1917. New York: Oxford University Press, 1985.
- Collins, John M. American and Soviet Military Trends Since the Cuban Missile Crisis. Washington, D.C.: The Center for Strategic and International Studies, 1978.
- Collins, John M. U.S. Soviet Military Balance 1980-1985. Washington, D.C.: Pergamon-Brassey, 1985.

- Colton, Timothy. The Dilemma of Reform in the Soviet Union. New York: Council on Foreign Relations, 1984.
- Crankshaw, Edward. Putting up with the Russians: Commentary and Criticism, 1947-84. Harrisonburg, VA.: Penguin Books, 1985.
- Danchenko, Colonel A.M., and Vydrin, Colonel I.F. Military
 Pedagogy (A Soviet View). Moscow, 1973. Translated and
 published under the auspices of the U.S. Air Force. Soviet
 Military Thought #7. Washington, D.C.: Government Printing
 Office, 1976.
- Daniel, Donald C., and Herbig, Katherine L., Eds. <u>Strategic</u> Military Deception. New York: Pergamon Press, 1982.
- Daniels, Robert V. Russia: The Roots of Confrontation. Cambridge, MA: Harvard University Press, 1985.
- Darwisha, Karen. Soviet Strategy Toward Western Europe.
- Dewhirst, Martin and Farrell, Robert, Eds. The Soviet Censorship. Metuchen, NJ: The Scarecrow Press, 1973.
- Dinerstein, H. S. War and the Soviet Union: Nuclear Weapons & the Revolution in Soviet Military & Political Thinking. New York: F. A. Praeger, 1962.
- Dibb, Paul. The Soviet Union: The Incomplete Superpower.
 Urbana and Chicago: University of Illinois Press, 1986.
- Druyzhinin, V. V., and Kontorov, D. S. <u>Decision Making and Automation: Concept Algorithm Decision (A Soviet View)</u>. Moscow, 1972. Translated and published under the auspices of the U.S. Air Force. <u>Soviet Military Thought #6</u>. Washington, D.C.: Government Printing Office, 1985.
- Dziak, John J. Soviet Perceptions of Military Power: The Interaction of Theory and Practise. National Strategy Information Center, Inc. New York: Crane, Russak & Company, Inc. 1981.
- Edmonds, Robin. Soviet Foreign Policy: The Brezhnev Years. New York: Oxford University Press, 1984.
- Einhorn, Robert J. Negotiating from Strength: Leverage in U.S. Soviet Arms Control Negotiations. New York: Praeger Publishers, 1985.
- Ellison, Herbert J., Editor. Soviet Policy Toward Western Europe: Implications for the Atlantic Alliance. Seattle:

- University of Washington Press, 1984.
- Erickson, John and Feuchtwanger, E.J., eds. Soviet Military Power and Performance.
- Erickson, John. The Soviet High Command. Boulder: Westview Press, 1984.
- Freeman, Lawrence. U.S. Intelligence and the Soviet Strategic Threat. Boulder: Westview Press, 1977.
- Frei, Daniel. Perceived Images: U.S. and Soviet Assumptions and Perceptions in Disarmament. Totowa, N.J.: Rowman and Allanheld Publishers, 1986.
- Garthoff, Raymond L. Soviet Military Doctrine. Glencoe, IL: Free Press, 1953.
- Garthoff, Raymond L. Soviet Military Policy: A Historical Analysis. New York: Praeger Publishers, 1966.
- Garthoff, Raymond L. Soviet Strategy in the Nuclear Age. New York: Frederick A. Praeger, 1958.
- Gervasi, Tom. The Myth of Soviet Military Supremacy. New York: Harper and Row, 1986.
- Golitsyn, Anatoliy. New Lies for Old: The Communist Strategy of Deception and Disinformation. New York: Dodd, Mead and Co., 1984.
- Gorbachev, Mikhail S. Perestroika: New Thinking for Our Country and the World. New York, N.Y.: Harper and Row, 1987.
- Gray, Colin S. The Soviet-American Arms Race. Saxon House: Lexington Books, 1976.
- Green, William C., Soviet Nuclear Weapons Policy: A Research Guide. Boulder: Westview Press, 1985.
- Haley, Ed; Keithly, David M.; and Merritt, Jack, Eds. <u>Nuclear Strategy</u>, Arms Control and the Future. Boulder: Westview Press, 1985.
- Halle, Louis J. The Cold War as History. New York: Harper and Row, 1967.
- Hammer, Darrell P. The USSR: The Politics of Oligarchy. Boulder: Westview Press, 1986.
- Hanrieder, Wolfram F., Editor. <u>Technology</u>, <u>Strategy and Arms</u> <u>Control</u>. Boulder: Westview Press, 1986.

- Haselkorn, Avigdor. The Evolution of Soviet Security Strategy. 1965-1975. New York: Crane, Russak & Co., 1978.
- Heller, Mikail and Nekrich, Aleksandr. Utopia in Power: The History of the Soviet Union From 1917 to the Present.

 New York, N.Y.: Summit Books, 1986. Translated from the Russian by Phyllis B. Carlos.
- Hemsley, John. Soviet Troop Control. New York: Pergamon Press, 1982.
- Herspring, Dale R. and Volgyes, Ivan. <u>Civil-Military Relations</u> in Communist Systems Boulder: Westview Press, 1978.
- Hingley, Ronald. The Russian Mind. New York: Charles Scribner & Sons, 1977.
- Hoffman, Erik and Laird, Robbin F., Eds. The Scientific-Technical Revolution and Soviet Foreign Policy. Elmsford, New York: Pergamon Press, 1982.
- Hoffman, Erik and Laird, Robbin F., Editors. The Soviet Policy in the Modern Era. New York: Aldine Publishers, 1984.
- Holloway, David. The Soviet Union and the Arms Race. 2nd ed. New Haven, Connecticut: Yale University Press, 1984.
- Hunt, R.N. Carew. Marxism: Past and Present. New York: Macmillian, 1955.
- Hunt, R.N. Carew. The Theory and Practice of Communism. New York: Macmillian, 1963.
- Jacobsen, C. G. Soviet Strategic Initiatives Challenge and Response. New York: Praeger Special Studies, Praeger Scientific, 1979.
- Jervis, Robert. Perception and Misperception in International Politics. Princeton: Princeton University Press, 1976.
- Jones, David R. Soviet Armed Forces Review Annual, Volume 9, 1984-1985. Washington D.C.: Academic International Press, 1986.
- Kaldor, Mary and Smith, Dan. <u>Disarming Europe</u>. London: The Merlin Press, 1932.
- Kanet, Roger E., Editor. Soviet Foreign Policy in the 1980's. New York: Praeger Scientific, 1982.
- Kegley, Charles W., Jr. and McGowan, Pat, Eds. <u>Foreign Policy USA/USSR</u>. Beverly Hills, California: Sage Publications, 1982.

- Kennan, George F. The Nuclear Delusion. Soviet-American Relations in the Atomic Age. London: Hamish Hamilton, 1984.
- Kissinger, Henry A. The Troubled Partnership. New York: McGraw-Hill, 1965.
- Knorr, Klaus, Editor. <u>Historical Dimensions of National Security</u> Problems. Lawrence, Kansas: Allen Press, 1976.
- Kozlov, Major General S. N. <u>The Officers Handbook</u>. Moscow: Voyenizdat, 1971.
- Krauss, Melvyn. How NATO Weakens the West. New York: Simon and Schuster, 1986.
- Laird, Robbin F. France, the Soviet Union and the Nuclear Weapons Issue. Boulder: Westview Press, 1985.
- Laird, Robbin F. and Herspring, Dale R. The Soviet Union and Strategic Arms. Boulder: Westview Press, 1984.
- Lockwood, Jonathan S. <u>The Soviet View of U.S. Strategic</u>
 <u>Doctrine: Implications for Decision Laking.</u> New York:
 National Strategy Information Center, Inc., 1983.
- Lomov, Colonel General N.A., ed. Scientific-Technical Progress and the Revolution in Military Affairs. Moscow, 1973.

 Translated and Published under the auspices of the U.S.
 Air Force. Soviet Military Thought #3. Washington,
 D.C.: Government Printing Office, 1975.
- Luttwak, Edward. The Grand Strategy of The Soviet Union. London: Weidenfeld and Nicolson, 1983.
- McGwire, Michael. Military Objectives in Soviet Foreign Policy. Washington D.C.: Brookings Institute, 1987.
- Meyer, Alfred G. Marxism: The Unity of Theory and Practise. Cambridge: Harvard University Press, 1954.
- Milburn Thomas W. and Watman, Kenneth H. On the Nature of Threat: A Social Psychological Analysis. New York: Praeger Publishers, 1981.
- Milovidov, Major General A.S., and Kozlov, Colonel V.G., eds.

 The Philosophical Heritage of V.I. Lenin and Problems of

 Contemporary War. Moscow, 1972. Translated and published
 under the auspices of the U.S. Air Force. Soviet Military
 Thought #5. Washington, D.C.: Government Printing Office,
 1975.

- Moreton, Edwina and Segal, Gerald, Eds. Soviet Strategy Toward Western Europe. Winchester: Allen and Unwin, 1984.
- Newhouse, John. Cold Dawn: The Story of SALT. New York: Holt, Rineholt and Winston, 1973.
- Nogee, Joseph L., Editor. Soviet Politics-Russia after Brezhnev. New York: Praeger Scientific, 1985.
- Nogee, Joseph L., and Donaldson, Robert H. Soviet Foreign Policy Since World War II, 2nd Edition. New York: Pergamon Press, 1984.
- Olive, Marsha McGraw, and Porro, Jeffrey D. <u>Nuclear Weapons in Europe: Modernization and Limitation</u>. <u>Lexington Books</u>. <u>Lexington</u>, <u>Massachusetts:</u> D.C. Heath & Co., 1983.
- Papp, Daniel S. Soviet Perceptions of the Developing World During the 1980's. Lexington: Lexington Books, 1985.
- Reznichnenko, V.G., Vorob'yev, I.N., et al. <u>Taktika</u> (Tactics) 2nd ed. Moscow: Voyenizdat, 1987.
- Pipes, Richard, Ed. Soviet Strategy in Europe. New York: Crane, Russak and Co., Inc., 1976.
- Pipes, Richard. Survival is Not Enough: Soviet Realities and America's Future. New York: Simon & Schuster, 1984.
- Radziyevskiy, A.I. <u>Dictionary of Basic Military Terms</u>. Moscow: Voyenizdat, 1965.
- Rice, Condoleezza. The Soviet Union and the Czechoslavak Army, 1948-1983: Uncertain Allegiance. Princeton: Princeton University Press, 1984.
- Rocca, Raymond and Dziak, John. <u>Bibliography on Soviet</u>
 <u>Intelligence and Security Services</u>. <u>Boulder: Westview Press, 1985</u>.
- Royal United Services Institute for Defence Studies (RUSI), RUSI & Brassey's Defence Yearbook 1985. New York: Pergamon Press, 1985.
- Rubenstein, Alvin Z. Soviet Foreign Policy Since World War II:

 Imperial and Global. Cambridge, Massachusetts: Winthrop
 Publishers, Inc., 1981.
- Rulish, Col. V.M. (Ret), Ed. <u>Military Force and International Relations</u>. Moscow: International Relations Publishing House, 1972.

- Savkin, V. Ye. The Basic Principles of Operational Art and Tactics (A Soviet View). Moscow, 1972. Translated and Published under the auspices of the U.S. Air Force.

 Soviet military Thought #4. Washington, D.C.:
 Government Printing Office, 1975.
- Scheer, Robert. With Enough Shovels. Reagan, Bush, & Nuclear War. London: Secker & Warberg, 1983.
- Schwartz. The North Atlantic Treaty Organization: Facts and Figures. Brussels: NATO Information Service, 1981.
- Scott, Harriet Fast and Scott, William F. The Armed Forces of the USSR 2nd Ed. Boulder: RUSI, 1981.
- Scott, Harriet Fast and Scott, William F., Eds. <u>The Soviet Art of War: Doctrine, Strategy, and Tactics</u>, Boulder: Westview Press, 1982.
- Scott, William F. Soviet Sources of Military Doctrine and Strategy. New York: Crane, Russak & Co., National Strategy Information Center, 1975.
- Selznick, Philip. The Organizational Weapon: A Study of Bolshevik Strategy and Tactics. New York: McGraw Hill 1952.
- Sheylag, V.V.; Glotochkin, A.D.; and Platonov, K.K. Military
 Psychology (A Soviet View). Moscow, 1972. Translated and
 published under the auspices of the U.S. Air Force. Soviet
 Military Thought #8. Washington, D.C.: Government Printing
 Office, 1976.
- Shulman, Marshall D. "U.S.-Soviet Relations and The Control of Nuclear Weapons." Barry M. Blechman, Ed. Rethinking the U.S. Strategic Posture. Cambridge, Mass.: Ballinger Pub. Co., 1982.
- Shultz, Richard H. and Godson, Roy. <u>Dezinformatsia</u>: <u>The Strategy of Soviet Disinformation</u>. New York: Berkeley Books, 1984.
- Sidorenko, A.A. The Offensive (A Soviet View). Moscow, 1970.
 Translated and published under the auspices of the U.S. Air Force. Soviet Military Thought #1. Washington, D.C.:
 Government Printing Office, 1975.
- Sigel, Leon V. <u>Nuclear Forces in Europe: Enduring Dilemmas, Present Prospects.</u> Washington: Brookings, 1984.
- Skirdo, M.P. The People, the Army, the Commander: A Soviet View. Moscow: Voenizdat, 1970, translation, U.S. Air Force.

- Sokolovsky, V. D. Soviet Military Strategy, 3rd edition. Edited with an analysis and commentary by Harriet Fast Scott. Copyright 1968. New York: Crane Russak Stanford Research Institute, 1975.
- Sonnenfeldt, Helmut, Editor. Soviet Politics in the 1980's. Boulder: Westview Press, 1984.
- Steele, Jonathan. Soviet Power: The Kremlin's Foreign Policy Brezhnev To Chernenko. New York: Simon & Schuster, Inc., 1984.
- Steele, Jonathan. <u>World Power: Soviet Foreign Policy Under</u>
 <u>Breznev and Andropov.</u> London: Michael Joseph Ltd, 1983.
- Strausz-Hupe, Robert. Protracted Conflict. New York: Harper, 1959.
- Szamuely, Tibor. The Russian Tradition. New York: McGraw Hill, 1974.
- Taylor, General Maxwell D. The Uncertain Trumpet. New York: Harper and Brothers, 1960.
- Terry, Sarah M. Soviet Policy in Eastern Europe. New Haven: Yale University Press, 1984.
- Tyushkevich. "Laws and Customs of War," Soviet Military Encyclopedia, Vol. 3. Moscow: Voyenizdat, 1977.
- Ulam, Adam B. Dangerous Relations: The Soviet Union in World Politics 1970-1982. New York: Oxford Union Press, 1984.
- Valenta, Jiri and Potter, William C. Soviet Decisionmaking for National Security. London: Allen & Unwin, 1984.
- Vidali, Vittorio. Diary of the Twentieth Congress of the Communist Party of the Soviet Union. Westport, Conn.: Lawrence Hill, 1984.
- Vigor, P. H. <u>A Guide to Marxism</u>. New York: Humanities Press, Inc., 1966.
- Vernon, Graham D., Editor. Soviet Perceptions of War and Peace. Ft. McNair: National Defense University Press, 1981.
- Wasserman, Sherri L. The Neutron Bomb Controversy: A Study in Alliance Politics. New York: Praeger Publishers, 1983.
- Whence the Threat to Peace. Moscow: Military Publishers House, 2nd Edition, 1982 and Third Edition, 1984.

- Whetten, Lawrench L., Editor. The Political Implications of Soviet Military Power. New York: Crane, Russak and Company, Inc., 1977.
- Whetten, Lawrench L., Editor. The Future of Soviet Military Power. New York: Crane, Russak and Company, Inc. 1976.
- Winner, Langdon. <u>Autonomous Technology: Technics-out-of-Control</u>
 as a Theme in Political Thought. Cambridge, Mass.: MIT
 Press, 1977.
- Wolfe, Bertram D. <u>Communist Totalitarianism</u>: Keys to the Soviet System. Boulder: Westview Press, 1985.

2. GOVERNMENT DOCUMENTS AND STUDIES

- Carlucci, Frank C., Report of the Secretary of Defense to the Congress on the FY 1990/FY 1991 Biennial Budget and FY 1990-1994 Defense Programs, Washington: G.P.O. (January 17,1989).
- Congressional Research Service Report, Modernization of NATO's
 Long Range Theater Nuclear Forces, Washington: G.P.O., 1981.
- Davis, R.G., The 31 Initiatives: A Study in Air Force-Army
 Cooperation, Washington: Office of Air Force History, USAF.
- Jones, David R., Editor. Soviet Armed Forces Review Annual, Volumes 8, 1983-1984, and Volume 9, 1984-1985.

 Academic International Press (1986).
- Report of a Study Group of the Institute for the Study of Conflict. The Peacetime Strategy of the Soviet Union. London: An ISC Special Report (Sept. 72 Jan. 73).
- Resnick, Joel. "U.S. Political/Military/Economic Trends" A report to the Systems Analysis Working Group of the FOTL Fhase II Study on June 1, 1988.
- Scott, Harriet Fast, and Scott, William F. <u>Bibliographic Index of Soviet Military Books</u>, 1980-1984. Technical Report Prepared for Director, Defense Nuclear Agency, Contract No. DNA 001-84-C-0174 (31 January 1986).
- State Department Special Report No. 88. Soviet Active Measures:
 Forgery, Disinfor ation, Political Operations, Washington:
 U.S. Department of State (October 1981).
- State Department Special Report No. 110. <u>Soviet Active Measures:</u> An Update. Washington: U.S. Department of State (Sept 83).

- U.S. Army, The Soviet Army: Operations and Tactics, FM 100-2-1. Washington: Headquarters DA (July 1984).
- U.S. Army, Operations, FM 100-5. Washington: Headquarters DA (May 1986).
- U.S. Army Institute for Advanced Russian and East European Studies. Critical Issues of Soviet National Security Policy. Garmisch, Germany: Sixth Annual Report (1972).
- U.S. Army Institute for Advanced Russian and East European Studies. The Soviet Union as Negotiator. Garmisch, Germany. Ninth Annual Report (1975).
- U.S. Congress, House Permanent Select Committee on Intelligence. Soviet Active Measures. Washington D.C.: G.P.O. (1982).
- U.S. Congress, House. <u>Active Measures</u>, Hearings before the Permanent Select Committee on Intelligence of the House of Representatives. Washington D.C.: G.P.O. (1982).
- U.S. Congress, House. Covert Action (The Forgery Offensive),
 Hearings before the Subcommittee on Oversight of the
 Permanent Select Committee on Intelligence of the House of
 Representatives Washington D.C.: G.P.O. (1980).
- U.S. Federal Bureau of Investigations Report, Soviet Active Measures in the U.S. Target Unions, Religion, Media Groups, Washington D.C.: ROA National Security Report 1988.
- Van Oudenaren, John. <u>Interviews by Soviet Officials in the Western Media: Two Case Studies</u>. Santa Monica, CA.: Rand, October (1985).
- Zamory, David, Follow-on-to-Lance (FOTL) Range Considerations from a Soviet Perspective, Science Application Incorporated (SAIC) Washington D.C. 1988.

3. PERIODICALS AND ARTICLES.

- Alexander, Arthur J. "Decisionmaking in Soviet Weapons Procurement. Adelphi Papers London: IISS, (1978): pp. 147-148.
- Atkeson, Edward B. "Soviet Military Theory: Relevant or Red Herring?" Parameters (Spring 1987).
- Bohlem, Celestine. "Soviets Offer Accord on Euro-Missiles."

 <u>Washington Post</u> (March 1, 1987).

- Bondarenko, Lt. Col. V.M. "Military-Technical Superiority:
 The Most Important Factor of the Reliable Defense of the
 Country," Communist of the Armed Forces (September 1966):
 p.8, as translated by H.F. Scott.
- Brzezinski, Zbignew. "The Future of Yalta." Foreign Affairs, 63 No. 2 (Winter 1984/85): p. 290.
- Canby, Steven L. "New Conventional Technology and the NATO/Warsaw Pact Balance: Part I. Adelphi Papers IISS #198 1985.
- Cimbala, Steven J. "Soviet Nuclear Strategies: Will They Do the Expected?" Strategic Review (Fall, 1985): pp. 67-77.
- "Charm Offensive" Christian Science Monitor February 2, 1989.
- Dobbs, Michael. "Soviet Leader meets with Reagan, Bush," The Washington Post December 8, 1988.
- Donnelly, Chris N. "The Development of Soviet Military Doctrine" International Defense Review, No. (12/1981).
- Dziak, John J. "The Institutional Foundations of Soviet Military Doctrine" <u>International Security Review</u>, Vol. 4, No. 4 (Winter 1979-1980 issue).
- Dziak, John J. "Soviet" "Active Measures." Problems of Communism (November/December 1984).
- Earle, Ralph III, and Richardson, Elliott. "Building on Gorbachev's Cuts in Europe" New York Times December 9, 1988.
- Ellison, Herbert J. "United Front Strategy and Soviet Foreign Policy" Problems of Communism (September-Carober, 1985). Vol. 34, No. 5.
- Evans, Rowland, and Novak, Robert. "Kohl's Anti-Missila Decision Reflects Precarious Political Position" Patriot Feb 17 89.
- Forsberg, Randall. "A Bilateral Nuclear Weapon Freeze,"
 Scientific American Vol. 247, No. 5. (November 1982).
- Freeman, Thomas L. "Baker in Bonn on Thorny Issue of Missile Upgrading" New York Times February 13, 1989.
- Galloway, Joseph L., Duffey, Brian, and Trimble, Jeff. "Working the Kremlin: Journalists Beware!!" U.S. News and World Report (September 15, 1986).
- Gan, V. "Soviet Ideological Perceptions" Soviet Press Selected Translations. Directorate of Soviet Affairs, Air Force Intelligence Service. (AFRP 200-1 86.2).

- Garner, William V. "Soviet Threat Perceptions of NATO's Eurostrategic Missiles." The Atlantic Institute for International Affairs Paris, (November 1983).
- Garthoff, Raymond L. "American Soviet Relations in Perspective"

 <u>Political Science Quarterly</u> (Winter 1985-1986).
- Garthoff, Raymond L. "Mutual Deterence and Strategic Arms Limitation" <u>International Security</u> (Summer 1978): pp. 125-130 and 146-147.
- Garthoff, Raymond L. "The Soviet SS-20 Decision" in <u>Survival</u> (May/June 1983). p. 110.
- Gosliko, John M. "Baker Tour Exposes US-West Germany Friction" ______ The Washington Post February 17, 1989.
- Glagolev, Igor. "The Soviet Decisionmaking Process in Arms Control Negotiations" ORBIS (Winter 1978): p. 771.
- Glantz, David M. "The Nature of Soviet Operational Art"

 Parameters Journal of the U.S. Army War College. Vol. XV.,
 No. 1., (Spring, 1985): p. 6.
- Gray, Colin S. "The Arms Race Phenomenon." World Politics (October 1971): p. 39.
- Gray, Colin S. "NATO's Nuclear Dilemma." Policy Review 22
 Current News Special Edition No. 956, Fall 1982, (26
 January, 1983).
- Gray, Colin S. "Planning for U.S. Security Interests." Proceedings (December, 1984).
- Green, William C. "Stepping up the Soviet Ladder Arms Race." NBC Defense and Technology International Vol. 2 No. 1 1987.
- Heller, Mikhail. "Andropov: A Retrospective View" Survey Vol. 28 No. 1 (120) (Spring 1984): p. 55.
- Herspring, Dale R. "The Soviet Military in the Aftermath of the 27th Party Congress" ORBIS (Summer 1986): p. 302.
- Jervis, Robert. "Cooperation Under the Security Dilemma." World Politics, Vol. 30 (2) (January 1978): pp. 167-214.
- Kapchenko, N. "Socialist Foreign Policy and the Restructuring of International Relations." <u>International Affairs</u> (Apr75).
- Kennan, George F. "The Sources of Soviet Conduct." Foreign
 Affairs July 1947, and "How Real is the Soviet Threat" U.S.
 News and World Report (March 10, 1980).

- Kipp, Jacob W. "The Role of Staff Culture in the Development of Soviet Military Theory." <u>Signal Magazine</u> (Dec 85).
- Kissinger. "How to Deal with Gorbachev" Newsweek Mar 2, 1987.
- Kramer, Michael. "Smart, Dull and Very Powerful: Sam Nunn." Time March 13, 1989.
- Kusin, Vladiver V., "Gorbachev and Eastern Europe." Problems of Communism (January-February 1986): p. 39-53.
- Kux, Dennis, "Soviet Active Measures and a Disinformation: Overview and Assessment." Parameters (Winter 1985).
- Laqueur, Walter. "What we Know About the Soviet Union." Commentary (February 1983).
- Laqueur, Walter. "U.S.-Soviet Relations." Foreign Affairs, America and the World 1983 Vol. 62, No. 3 (1984).
- Larrabee, F. Stephen, and Lynch, Allen. "Gorbachev: The Road to Reykjavik." Foreign Policy. (Winter 86/87).
- Lebedev, N. "On the Class Character of Peaceful Coexistence." Kommunist, No. 4 (March 1974): p. 57.
- McFarlane, Robert C. "U.S.-Soviet Relations in the Late 20th Century." Current Policy No. 733 U.S. Department of State Bureau of Public Affairs, Washington, D.C. (August, 1935).
- Menning, Bruce W. "The Methodology of Foresight and Forecasting in Soviet Military Affairs." (Unpublished paper Mar 1987).
- Newsweek July 18, 1983.
- Nitkin, Major General Ye, and Baranov, Colonel S. "The Revolution in Military Affairs and Measures of the CPSU for Raising the Combat Might of the Armed Forces." VM No. 6 (1968) FP D005/69.
- Nixon, Richard. "Super Power Summitry." Foreign Affairs Council on Foreign Relations, Inc. Vol. 64, No. 1 (Fall 1985).
- Paine, Christopher. "Pershing II: The Army's Strategic Weapon" B.A.S. Volume 36 # 8. (October 1980).
- Paparella, Ivo. "Soviet Strategy: A Methodological Approach." Rusi (March 1986).
- Pincus, Walter. "Neutron Killer Warhead Buried in ERDA Budget." Washington Post (June 6, 1977).

- Prados, John; Wit, Joel S.; and Zagurek, Michael J. "The Strategic Nuclear Forces of Britain and France." Scientific America Volume 255 No. 2, August 1986.
- Floss, Sidney I. "A New Soviet Era" Foreign Policy No. 62. pp. 46-60. (Spring 1986).
- Range, Peter Ross. et. al. "The KGB's New Muscle" U.S. News and World Report (September 15, 1986).
- Reed, Colonel Jean D. "NATO's Theater Nuclear Forces: A Coherent Strategy For the 1980's." The National Defense University. National Security Affairs Monograph Series 83-8 (1983).
- Revyin, Philip. "Europeans Begin Planning for the Day When U.S. Pulls Troops Back Home." Wall Street Journal Feb 17, 1989.
- Rivkin, David B., Jr., "What Does Moscow Think?" Foreign Policy (Summer, 1985).
- Rybkin, Y. and Karteenan, S. "Military Parity as a Factor of Security." International Affairs (August 1982).
- Ryzhenko, F. "Peaceful Coexistence and Class Struggle." Pravda (August 22, 1973): pp. 3-4, cited in Current Digest of the Soviet Press (August 24, 1973).
- Rosenburg, "The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960." <u>International Security</u> Spring 1983.
- Rothwell, USMC, LTC Richard B. "Russian Roulette." Proceedings
 December 1982.
- Ryzhenko, "Peaceful Coexistence and Class Struggle." Pravda
 August 22, 1973, cited in Current Digest of the Soviet Press
 (August 24, 1973).
- Sartorius, John. "Viewing Big Eye: Through the Soviet Looking Glass." NBC Defense and Technology International Vol. 2 No. 1 (1987 Yearbook and Buyers Guide).
- Shapiro, Leonard. "The International Department of the CPSU: Key to Soviet Policy." International Journal Winter 76-77.
- Shuman, Marshall D. "The Super Powers: Dance of the Dinosaurs." Foreign Affairs Vol 66 No. 3, 1987/88.
- Smith, R. Jeffrey. "Gorbachev Leaves Key Issues Unresolved." Washington Post March 1, 1987.

- Syms, Steven D. and Snow, Edward Jr. "Soviet Propaganda and the Neutron Bomb Decision." Political Communication and Persuasion No. 3 1981.
- Talbot, Strobe. "Buildup and Breakdown." Foreign Affairs, America and the World 1983 Vol. 62, No. 3 (1984).
- Tatu, Michael. "U.S.-Soviet Relations: A Turning Point."

 Foreign Affairs, America and the World 1982 Vol. 61 No.
 3 (1983).
- Thompson, James A. "Warfighting Strategy." <u>Survival</u> The International Institute for Strategic Studies. (May/June 83)
- Turlington, John E. "Truly Learning the Operational Art." Parameters (Spring 1987).
- Valenta, Juri. "The Explosive Soviet Periphery." Foreign Policy No. 51 (Summer 83).
- Wall Street Journal "A Soviet View of U.S. Policy" Excerpted from an article by Georgi Arbatov published in Pravda Mar 80 translated version appeared in Soviet News. (Apr 29, 1980).
- Weeks, Albert. "Soviets May be Retooling Doctrine" <u>Defense</u> Science (December-January, 1986).
- Wohlstetter, Albert. "Is There a Strategic Arms Race?" Foreign Policy Summer and Fall 1974.
- Wohlstetter, Albert. "Rivals But No Race." Foreign Policy No. 16 Fall 1974.
- Tren, C.S. "Soviet Criticizes U.S. Proposal for Small NATO Nuclear Arms." New York Times 5 February 1974.
- York, Herbert. "Multiple Warhead Missiles." Scientific American Vol. 229 No. 5 November, 1973.
- York, Herbert. "Soviet Thinking." Air University Review Vol. 36 (July-August 1985): p. 55-65.